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The First Year College Experience: Predictors of Natural Mentoring Relationships & Students' Academic Outcomes

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THE FIRST YEAR COLLEGE EXPERIENCE: PREDICTORS OF NATURAL MENTORING RELATIONSHIPS & STUDENTS' ACADEMIC OUTCOMES

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VITA

The author was born in Buenos Aires, Argentina, June 26, 1973. He graduated from the *Instituto Franklin* High School, and received a degree in clinical psychology from *Universidad de Belgrano*, on the year 2000 in Argentina. From the year 2001 to 2003, he worked as a clinician for the District of Columbia Mental Health Department in Washington D.C., USA. In 2004, the author participated in a post-baccalaureate researcher assistantship experience at the National Institute of Mental Health. Since 2005, the author has worked in number of research projects at the Department of Psychology and the Center for Access and Attainment at DePaul University. In the year 2008, the author received a Masters degree in community psychology from DePaul University. Currently the author is a doctoral student in Community Psychology at DePaul University.

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CHAPTER I.

INTRODUCTION

The Transition to College

College is an important element in youth's socialization process and career development. It provides individuals with access to higher quality and better paying jobs. Level of education is found to be positively correlated with income at all ages (Seteverink, Westerhof, Bode & Dittmann-Kohli, 2001). Researchers highlight that advancement in one's education increases one's socioeconomic status (SES; Porctor & Dalakar, 2003; U.S. Census Bureau, 2009). For example, the difference in life earnings between individuals with a high school diploma and a college degree is estimated to be over a million dollars (U.S. Census Bureau, 2009).

In addition to increased earnings, a higher level of education is found to be related to negative psychological outcomes, such as neuroticism, stress and loneliness (Bishop & Martin, 2007; Savikko, Routasalo, Tilvis, Strandberg & Pitkala, 2005). Moreover, a cross-sectional study of a random sample of 4,034 adults aged 40- to 85-years-old found that level of education is significantly and positively correlated to life satisfaction, positive affect and hope, and negatively correlated with physical decline and loneliness (Seteverink et al., 2001).

Overall, without a post-secondary education degree, young adults are less competitive for higher paying jobs. Less educated adults decrease their chances of improving their social mobility and increase their chances of confronting negative life experiences related to their overall well-being. Therefore, the transition to

college is an important step towards increasing the quality of life of individuals.

Although a successful transition to college can determine young adults' future SES and well-being, the U.S. Department of Education (2002) reported that 32% of college students left post-secondary institutions within the first 3 academic years. Thus, students who drop out of college may be less likely to succeed economically in adulthood, which may put them at risk for negative outcomes related to lower SES, such as lack of access to health care, adequate nutrition and sanitary living environments (Gallo & Matthews, 2003).

It is of critical importance to understand potential reasons of college attrition. Understanding young adults' college transition experiences will help in the development of college practices aimed to reduce attrition, and as a result, improve young adults' access to more financial stability and increase their chances for more positive life experiences.

Challenges During the Transition to College

Evidence suggests that attending college is a life transition that adds a great deal of stress on students' lives. In particular, the first year of college is acknowledged as a stressful time of social and academic adjustment (Lubker & Etzel, 2007; Thomson, 2008; Tinto, 1993). In general, most of the research on the college experience focuses on the stressors faced by first-year students, such as changes in their social networks, leaving their family, making new friends and adjusting to a new community (Barnett & Harris, 1984; Hurtado et al., 2007; Lafreniere & Ledgerwood, 1997; Lapsley, Rice & Shadid, 1989; Thompson, 2008; Wintre &Yaffe, 2000). The potential value of understanding students' adjustment to college lies in the use of such findings for programmatic efforts

aimed to facilitate the adjustment to college for students who experience difficulty during this time.

First-year students experience new complexities with regard to the novelty of college level academic work and their social interactions within college. Students have to adjust to a new environment as well as to new social expectations regarding their behaviors and academic performance during the college transition (Hays & Oxley, 1986; Hicks & Heastie, 2008; Larose, Bernier & Tarbulsy 2005; Lubker & Etzel, 2007; Thomson, Orr, Thomson, Grover, 2007; Thomson, 2008). Lubker and Etzel (2007) describe the first year of college as a period of "divestment of old roles and investment into the new roles of college life" (p. 458). Larose et al. (2005) state that during the first year of college students take on greater responsibilities than they had in high school. For example, college challenges students to manage their academic responsibilities, to be self-disciplined in their academic work, to take initiative to seek faculty support, and to make decisions about their academic and professional future (Larose et al., 2005; Tinto, 1975; Tinto, 1995).

Given the variety of stressors and challenges that first-year college students experience, researchers have found declines in students' social and psychological outcomes during this period (Hays & Oxley, 1986; Larose & Boivin, 1998). Further, living on campus has its own unique stressors as students must cope not only with the stress associated with university life but also with being separated from parents, friends, and their community, as well as with the stress of relocating (Hicks & Heastie, 2008). Results from a cross-sectional study of the transition to college among 514 first-year students showed a significant

difference between students living on-campus and students living off-campus in stress and in their psychological and physical health (Hicks & Heastie, 2008). It was found that in comparison with students who lived at home, on-campus students experienced higher levels of stress, psychological problems and physical problems (Hicks & Heastie, 2008). Research also illustrates that the transition to college is related to increases in loneliness, homesickness (Lubker & Etzel, 2007) and risky behaviors, such as substance abuse (Hildebrand, Johnson, & Bogle, 2001). The interaction with the new environment and the changes in social networks are additional factors that have been suggested to be related to these negative outcomes (Larose et al., 2005). In sum, the transition to college presents multiple academic and social challenges for students.

College Adjustment and the Role of New Relationships

During the college transition, as previously mentioned, there are a number of changes in students' social experiences (Barnett & Harris, 1984; Bordes and Arredondo, 2006; Hurtado et al., 2007; Lafreniere & Ledgerwood, 1997; Lapsley, Rice & Shadid, 1989; Thompson, 2008; Wintre &Yaffe, 2000). Changes in social networks are usually depicted by the literature as a potential stressor for freshman students' during their first year of college (Lapsley, Rice & Shadid, 1989; Thompson, Thompson & Grover, 2007; Wintre &Yaffe, 2000).

At the same time, a number of research studies have suggested that the development of new relationship during college may helped students succeed in their academic experience. In recent years, research has highlighted the importance of social support during the transition to college (Bordes and Arredondo, 2006; Duchesnne, Retelle, Larose, Guay, 2007; Rodger & Tremblay,

2003; Sanchez, Bauer, Paronto, 2006; Sanchez, Reyes, Singh, 2005; Smith, 2007; Wintre & Yaffe, 2009). Also, the college retention literature suggests that the size of the students' network of support will have a positive effect on students' academic outcomes and reduce the risk of attrition (Garcia, 2010; Museus & Quaye, 2009; Portes & Fernández-Kelly, 2008; Perna & Titus, 2005). Also, Pascarella and Terenzini (1991, 2005) suggest that researchers over the last 30 years have emphasized the role of the environment and "*inter*individual" or relational factors in college students' success.

In general, researches have examined the role of social support from faculty, college staff and advanced peers in college students' outcomes (Astin, 1985, 1995; Holland, 1997; Tinto, 1993; Thomson, 2008; Pascarella, 1985). Also, studies on non-parental support during the transition to college have also shown positive relationships between different types of social support and college students' persistence, GPA and comfort with college educational environment (Bordes and Arredondo, 2006; Kim & Sax, 2009; Rodger & Tremblay, 2003). For example, Kim and Sax (2009) found that six months of out-of-class student-faculty relationships predict higher college GPAs. Also, a college-based cross-age intervention was shown to be related to college students' outcomes, such as satisfaction with the university (Sanchez, Bauer & Paronto, 2006). Overall, research shows that the new relationships developed within the college context, such as peer support (Buote, et al. 2007; Thompson, 2008; Wintre, Yaffe, 2009) and student-faculty interaction (Kim & Sax, 2009), elicit students' positive academic outcomes.

Theoretical Framework

The transition to college can be viewed as the result of the interactions among context, individual characteristics and adaptation. Moos' (2002) conceptual framework proposes that individual characteristics, such as cognitive abilities, socio-emotional competence, and coping style, and the characteristics of the environment to which a person transitions affect one another and influence individual functioning, maturation and psychosocial outcomes. Moos' (2002) theoretical framework is appropriate for understanding how the adjustment to college may be explained by students' individual-level characteristics, previous experiences, and context. Moos' model (2002) suggests that students' relationships within the college environment will impact their personal growth. For that reason, any transitory life event, such as the transition to college, exerts a long-term influence on students' maturation. In sum, Moos (2002) proposes that life transitions will affect the psychological functioning and socio-emotional development of individuals. Figure 1 displays a visual model of Moos' theoretical framework suggesting how the social context and individual characteristics may interact and affect students during the transition.

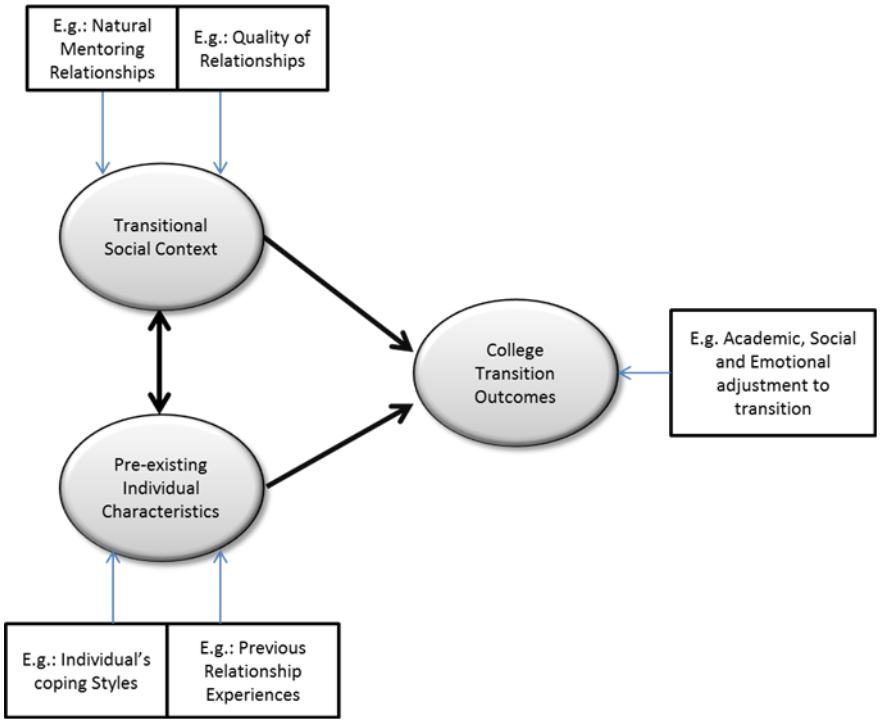

Figure 1. Visual representation base on Moos theoretical framework (2002) to understand college students' transition experience.

Based on Moos' (2002) model, a successful transition results from more than students' academic skills. As mentioned previously, evidence shows that the college transition includes leaving old support systems, developing new relationships with others, and building new support systems to cope with the new responsibilities of being a college student (Buote et al., 2007; Lubker & Etzel, 2007; Thompson, 2008; Tinto, 1997). Indeed, individuals' success in their first year of college depends on how well these socio-relational tasks are met. Some students may select and mold situations and seek support systems to help them adjust, while others may not. At the same time, the college environment might be conducive or not to developing new, healthy social support systems. Moos' (2002) model provides possible reasons why some students experience declines in social, psychological and academic outcomes, whereas others flourish in the face

of the same transition. In particular, the model suggests that first-year students' individual characteristics (e.g., coping style), previous relationships (e.g., relationship with parents), and their development of new relationships in college (e.g., mentoring relationships), will affect their social, psychological, and academic adjustment.

Mentoring During the Transition to College

The term mentoring has generally been used to describe a relationship between two persons: a mentor, who has more experience and knowledge, and a mentee, who is the less experienced in this dyad (DuBois & Karcher, 2005; Rhodes, 2002). In the field of education, mentoring is described as a relationship between a student and an older figure, such as a teacher, a counselor or a coach (Portwood & Ayers, 2005), and mentoring typically takes place at an educational setting (e.g., school, college, university). Mentoring relationships occurring within educational contexts are aimed to benefit students by helping them to improve their academic performance and/or to prevent academic failure (Larose & Tarabulsy, 2005; Portwood & Ayers, 2005).

Research on the role of mentoring in college students has grown during the past two decades (Crisp & Cruz, 2009; Jacobi, 1991). Studies have investigated the role of mentoring in different types of students, including students of color, first-generation college students and students at-risk for academic failure (Bernier, Larose & Soucy, 2005; Bordes & Arredondo, 2005; Campbell & Campbell, 2007; Ishiyama, 2007; Kim & Sax, 2009; Smith, 2007; Zalaquett & Lopez, 2006). Evidence shows that mentors provide support and assistance in a variety of areas, including academic, professional and career

development (Crisp & Cruz, 2009). Mentoring in postsecondary education has been typically viewed as a close personal relationship between a professor and a student (Johnson, 2006). But, it is important to note from the college mentoring literature that the mentor role is not limited to faculty members; many of the mentoring functions have been shown to be provided by staff, graduate students, advanced undergraduate students, peers and religious leaders (Zalaquett & Lopez, 2006).

College mentoring can be formal or informal (Campbell & Campbell, 1997; Chao, Walz & Gardner, 1992; Crisp & Cruz, 2009). Formal mentoring refers to a relationship created in the context of a program aimed to deliver services, whereas informal or natural mentoring relationships (NMRs) develop organically from individuals' own social networks (DuBois & Karcher, 2005; Campbell & Campbell, 1997; Rhodes, 2002; Rhodes, Bogat, Roffman, Elelman & Galasso, 2002; Zimmerman Bingenheimer & Behrendt, 2005). NMRs may result from a mutual intention of both mentors and mentees and may focus on long-term goals (Zimmerman et al., 2005; Spencer, 2006). In contrast, formal mentoring usually involves a third party who manages the parameters of the relationship, such as the match between mentors and mentees and the frequency of contact in the relationship (Baker & Maguire, 2005; Sipe, 2005). Most of the research on college mentoring explores the role of formal mentoring relationships in students' lives (Crisp & Cruz, 2009), rather than examining NMRs.

The current study will examine NMRs that students develop within a university setting. However, because of the limited literature on college students'

NMR, studies on formal mentoring will also be reviewed to better understand the role of mentoring in college students' outcomes overall.

The Role of Mentoring in College Students' Outcomes

There is a scarcity of research examining mentoring relationships in college. Additionally, most of this research only investigates the relationship between undergraduate students and faculty members (Crisp & Cruz, 2009; Johnson, 2006). Even fewer studies have investigated the role of informal mentoring in college students, although studies have shown evidence of college-aged young adults reporting relationships with natural mentors (e.g., DuBois & Silverthorn, 2005a; Erickson, McDonald & Elder, 2009; Sanchez, Reyes & Singh, 2006; Sanchez, Reyes, Singh, 2006). Next, the literature examining college-based mentoring programs will be described, which will show the need to better understand the role of NMRs within the college context.

Formal mentoring between students and faculty during the transition to college has been shown to be positively related to students' grade point average (Crisp & Cruz, 2009; Johnson, 2006). Only one study showed longitudinal positive academic outcomes comparing mentored and a control group of nonmentored students (Campbell & Campbell, 2007). Campbell and Campbell's (2007) longitudinal study demonstrated that 339 students participating in a faculty-student mentoring program had higher GPAs at the end of the first year of college than a matched control group of students who did not participate in the program (this difference disappeared after the first year of college). Additionally, the study showed that students in the mentored group had lower college dropout rates than the control group during their first year in college; the dropout rate for

mentored students was approximately half that of the control group (15% vs. 26%, respectively).

Two studies of formal mentoring have examined self-perceived college outcomes, such as college adjustment, college self-efficacy and educational attainment (Soucy & Larose, 2000; Santos & Reigadas, 2002) These studies show that formal mentoring during the college transition is related to more positive emotional, psychological and academic adjustment in students (Soucy & Larose, 2000). Soucy and Larose (2000) conducted a longitudinal study of 158 students at three different colleges in Quebec, Canada. At the end of the second semester, the feelings of a secure attachment in their mentoring relationship during the first semester predicted students' more healthy emotional and academic adjustment to college while controlling for students' initial levels of adjustment and attachment to parents.

Research on the role of formal mentoring programs in college not only shows benefits for GPA and adjustment to college, but also demonstrates that mentoring is related to students' college self-efficacy and academic goals (Santos & Reigadas, 2002). Santos and Reigadas' (2002) examined students participating in a mentoring program and found that students' college self-efficacy significantly increased, and they had better defined academic goals after participating in the program compared to before program participation. These findings provide additional support that mentoring plays a positive role in undergraduate students' college experiences. A major limitation of this study, however, is that without a comparison group it is unclear whether mentoring actually influenced academic self-efficacy and academic goals. It is possible that more time in college, rather

than mentoring, helps a student better define his/her academic goals and feel more efficacious.

Much of the work on college mentoring has examined students' relationships with formal mentors and only three studies have investigated natural mentoring in college students, even though evidence shows that college-aged individuals report supportive relationships with non-parental adults (Erickson et al., 2009; DuBois & Silverthorn, 2005a; DuBois & Silverthorn, 2005b; Sanchez et al., 2005; Sanchez et al., 2006; Zalaquett & Lopez, 2006). The presence of natural mentors during the college-aged years has been shown to be positively related to students' educational attainment (DuBois & Silverthorn, 2005a). A study examined the relationship of NMRs using a large, nationally representative sample (n=2323); DuBois and Silverthorn (2005a) examined the role of natural mentoring in older adolescents and young adults aged 18 to 26 years. Seventy-two percent of the participants reported having a mentor. The authors found that having a natural mentor significantly predicted both the completion of high school and college enrollment. These findings suggest that natural mentoring may play an important role in the educational attainment of adolescents' and young adults.

Evidence shows that non-parental adults appear to play a role in college students' academic progress. Zalaquett and Lopez (2006) qualitatively explored the academic experiences of 13 Latino undergraduate students, who reported having informal mentoring experiences with family members, teachers, faculty and counselors during college. Students' stories revealed that these mentoring relationships played a positive role in students' lives during the transition to college. The majority (77%) of the participants mentioned three critical forms of

support provided by their mentors during their freshman year: initial guidance to the university; help in acquiring college organizational values, culture and customs; and advice and moral support when needed. Participants reported that the support provided by their mentors was critical for their academic success (Zalaquett & Lopez, 2006). Also, Sanchez et al.'s (2006) qualitative study of 10 Mexican American college students and their mentors showed the value of informal mentoring during the transition to college. Sanchez et al. (2006) found that mentoring from peers and institutional figures (e.g., counselors, staff) provided academic-related benefits, such as enrollment in college and improvement of grades while in college. These two studies show that college students identify informal mentors on campus and the valuable role they play in their educational experiences.

Although only a few studies have examined the role of natural mentors' in college students' educational experiences, evidence suggests that having a natural mentor plays a positive role. However, there are a number of limitations in natural mentoring research overall, as outlined by Zimmerman et al.'s (2005) literature review. First, researchers typically examine the association between the presence of a natural mentor and educational outcomes and assume that the significant associations are because having a natural mentor leads to positive outcomes in students (Zimmerman et al., 2005). However, it is possible that youth with natural mentors are already better off and possess characteristics that make them more appealing to potential mentors and develop relationships with them. Second, Zimmerman et al. (2005) state that many characteristics of NMRs (e.g., quality of the relationship) are unknown, which makes it difficult to understand *how*

mentoring influence positive outcomes in students. Third, researchers generally assume that youth have only one mentor in their lives (Zimmerman et al., 2005). It is possible that youth and young adults have more than one non-parental adult who provides them with guidance and support. For example, Sanchez, Esparza and Colon (2008) found that high school students identified up to three natural mentors. Having more mentors may have a cumulative effect on youth's academic outcomes. In fact, Sanchez et al. (2008) found that having more mentors predicted fewer absences, greater sense of belonging and higher educational expectations in students. The current study filled these gaps in the literature by examining characteristics that predict the presence of natural mentors, the characteristics of mentoring relationships, and multiple mentoring relationships in college students.

In sum, although researchers state that studies of student-faculty mentoring programs remain unsophisticated and focus almost exclusively on students' potential positive experiences (Crisp & Cruz, 2009; Johnson, 2007; Johnson, Rose & Schlosser, 2007), a number of studies show evidence of the positive role of college mentoring programs in students' experiences (Bernier et al., 2005; Campbell & Campbell, 1997; Campbell & Campbell, 2007; Crisp & Cruz, 2009; Kahveci, Southerland & Gilmer, 2006; Larose, Tarabulsy & Cyrenne, 2005; Morales 2010; Sanchez, Bauer & Parronto, 2006; Soucy & Larose, 2000). But only three studies showed evidence that student-faculty mentoring programs improved college adjustment, college self-efficacy, educational attainment and GPA (Campbell & Campbell, 2007; Soucy & Larose, 2000; Santos & Reigadas, 2002). And although evidence shows that college-aged individuals report supportive relationships with non-parental adults (Erickson et al., 2009; DuBois &

Silverthorn, 2005a; DuBois & Silverthorn, 2005b; Sanchez et al., 2005; Sanchez et al., 2006; Zalaquett & Lopez, 2006), no studies have examined if the presence of NMRs within the college context specifically and during the first year of college is related to students' academic adjustment and GPA.

Understanding NMRs of college students has important implications for the college transition and mentoring literatures. It is rare that only formal mentoring relationships will account for students' overall progress and achievement in college. It is likely that some students are developing NMRs with individuals on campus. Understanding which students develop these relationships and the characteristics of these relationships could provide insight to the development of mentoring programs targeting students who are having difficulty during the transition.

Predictors of Mentoring Relationships

Another gap in the mentoring literature is the lack of understanding about the formation of NMRs. Few studies have examined predictors of the development of mentoring relationships (Mullen, 2007; Zimmerman et al., 2005). The importance of learning about what predicts the development of mentoring relationships is twofold. First, formal mentoring programs are, in general, seeking to create the special relationships that some youth develop naturally with non-parental adults, which have been identified as protective for disadvantaged youth (Rhodes, 2002; Spencer, 2007; Zimmerman et al., 2005). Thus, learning about the conditions that facilitate the development of an NMR may provide insight to volunteer mentoring programs. Second, learning about the factors that predict the development of mentoring relationships will improve the knowledge base about

youth risk factors. For example, learning that students' help-seeking behaviors has effects on the development of NMRs has implications for the prevention of unhealthy college students' adjustments, which could reduce the rates of students' academic failure by providing students with training on help-seeking behaviors while transitioning to college. Potentially, knowing about contextual or individual characteristics associated with the development and/or the lack of mentor relationships may improve current theoretical understandings of positive youth development, which ultimately will impact youth service delivery strategies.

Overall, examining predictors of mentoring relationships during the transition to college is of great importance. First, investigating the predictors of NMR in college will help us better understand how pre-existing characteristics affect students' development of support systems during their transition to college. Second, learning about the role of these predictive factors in students' transition to college will have implications for programmatic efforts aimed to facilitate students' college success. The present study examined whether college students' attachment to their parents and their coping style predict the development of NMRs during the first year of college.

Attachment to Parents

Although few researchers have examined what factors predict the development of NMRs, most investigators in this area have discussed theoretically why some youth develop mentoring relationships and others do not. Mentoring researchers have used Bowlby's attachment theory to explain why some youth develop mentoring relationships (Barrera & Bonds, 2005; Goldner & Mayseless, 2008; Rhodes, 2002; Zimmerman et al., 2005).

In Bowlby's (1969) terms, attachment refers to the state and quality of individuals' emotional bond, in terms of their dependency and independence, to early care giving figures. Attachment can be secure or insecure. Bowlby claims that to feel safe and secure is to have a secure attachment to a caregiver. Individuals who experience a secure attachment with initial caregivers will also feel safe in subsequent social interactions with new caregivers and other adults. In contrast, individuals who are insecurely attached might experience mixed feelings towards their primary caregiver, such as a fear of rejection, irritability and dependency (Holmes, 1993), and as a result will feel unsafe in future interactions with other adults. The early emotional bond with parents is at the center of initial working models of self in relationships with others.

Overall, parent-child relationships play an important role in adolescents' social adjustment. A number of prospective studies have shown that the pattern of attachment (i.e., secure or insecure) that one develops tends to persist over time (Bowlby, 1988). Evidence from research on adults' attachment to their parents suggests that their level of attachment does not vary much from their childhood attachment scores (Bowlby, 1988). For example, a study showed that parental attachment was moderately related to adolescent's competency in friendships and romantic relationships (Engels, Finkenauer, Meeus & Dekovic, 2001). In sum, Bowlby's (1969) theory suggests that young adults with a healthy attachment history will have an easier time trusting others and getting to know new people with whom to develop relationships. Despite the suggestions that youth's levels of attachment might explain why some form mentoring relationships, there is limited empirical evidence to support this idea.

There are three natural mentoring studies that support the idea that parental attachment is related to the presence of mentoring. Rhodes, Contreras and Mangelsdorf (1994) found that adolescent mothers with natural mentors reported that their mothers were more accepting of them during childhood compared to participants without mentors. Moreover, Wang et al. (2009) found that parental attachment style (i.e., avoidance) was negatively related with willingness to participate in a mentoring relationship in the future, for both mentors and mentees. Finally, a qualitative study showed that some participants with no natural mentors or short-term NMRs reported negative support or lack of support from immediate family members, particularly parents (Sanchez, Esparza, Berardi & Pryce, 2010). These findings suggest that parental attachment may be related to the development of NMRs.

Researchers have used Bowlby's (1969) attachment theory to understand the socio-emotional development from childhood to adulthood. Therefore, attachment theory is a relevant framework to understand young adults' adjustment to college. The experience of transitioning to a new environment and the need to develop new relationships is more stressful for some individuals than for others. Attachment theorists argue that early attachment styles persist and evolve into adulthood in a consistent way and predict how well adults cope with developmental milestones, such as adjusting to college (Kenny & Rice 1995; Lopez & Gormerly, 2002; Mallinkrodit & Wei, 2005). Based on attachment theory, it is inferred that college students with a healthy attachment to their parents will have more confidence to explore the new social environment during the transition than those students with insecure patterns of attachment. Thus,

students with such confidence may develop mentoring relationships at college. These new relationships ultimately provide students with the required support and guidance needed to successfully adapt to the college environment.

Students experiencing a difficult time during the first-year transition may need help from peers, faculty, and staff with their adjustment. It was expected that college students' attachment style would predict the presence of NMRs on campus. The present study tested this association. Understanding the role of students' attachment to their parents in the development of mentoring relationships may help in the creation and implementation of mentoring programs. For example, by identifying students' patterns of attachment to parents, college administrators and staff working in programs aimed to provide support to students, such as mentoring interventions, will better understand which students need more support in their mentoring relationships.

It was also expected that parental attachment would predict students' social behavior, particularly their coping styles. The specific coping style that attachment was expected to influence is help-seeking behavior. As previously stated, "attachment to parents in the early years of development may evolve into social support during the latter stages of childhood and during adolescence" (Zimmerman et al., 2005, p. 145). Hence, it is likely that secure attachment styles leads to help-seeking behaviors in individuals, which then leads to socially supportive relationships, such as NMRs.

Coping

Lazarus and Folkman (1984) defined coping as "constantly changing behavioral or cognitive effort to manage external or internal demands that are

appraised as taxing and exceeding the resources of a person" (p. 141). Coping involves persons' efforts to manage stress, whether the process of dealing with the stress is adaptive or not. Coping researchers state that adaptive coping refers to the effectiveness of a given coping response (Lazarus, 1993a; Skinner, Edge, Altman & Sherwood, 2003). It is important to highlight that coping behaviors will occur as individuals attempt to manage stressors.

There are numerous coping styles (Skinner et al., 2003), but the present study explored a specific coping style, *support seeking strategies* (Ayers, Sandler, West & Roosa, 1996; Ebata & Moos, 1991; Lazarus, 1993a; Lazarus, 1993b; Lazarus & Folkman, 1984). Support seeking strategies refer to "the use of other people as resources to assist in seeking solutions to the problem situation" (Ayers & Sanders, 1999, p. 6). Support seeking strategies include seeking advice or information or direct task assistance, and turning to people who may listen or provide information during times of stress. The present study aimed to identify if this coping style mediated the association between attachment to parents and the presence of NMRs within the college context.

Researchers have found an association between attachment and support seeking behaviors. Larose (1995) found that students with an insecure attachment to their parents perceived themselves and were perceived by peers as unwilling to get assistance from college teachers when academic problems occurred. Furthermore, Larose, Bernier, Soucy and Duchesne (1999) found that college students with a more secure attachment were more likely to seek help from teachers. The authors suggested that the student-teacher relationship in many

ways resembles the context of a parental relationship; this resemblance activates original attachment schemas, which affects students' behaviors towards teachers.

Individuals who engage in help-seeking strategies are more likely to obtain social support. Individuals who solicit help usually start requesting help from family, friends and other members of their social networks (Barker, 2007; Boldero & Fallon, 1995). Seeking help from relatives may prove to be successful, which might contribute to make seeking help a frequently employed coping mechanism (Gourash, 1978). A recent literature review on adolescents' help-seeking behaviors highlights the significant positive association between adolescents' help-seeking behavior and youth's perceptions of availability of support (Barker, 2007). Barker (2007) suggests that youth's help-seeking behaviors set up the conditions to create a rich supportive network for them, albeit the perception of available support is also a reason for youth to seek out for help. Further, adolescents' help-seeking behaviors may be based on their positive, negative or neutral experiences of support, which in turn influences subsequent decision about seeking help in the future (Barker, 2007).

Despite the suggested association between attachment to parents, help-seeking behaviors, and mentoring relationships, there is a lack of studies examining the relationship among these three variables. To date, only one study has examined the relationship between attachment to parents and help-seeking behaviors among college students (Larose, Bernier, Soucy & Duchesne, 1999). And, only one study has investigated the relationship between help-seeking behaviors and the development of a supportive network during the transition to college (Barker, 2007). The relationship between attachment to parents and

NMRs in college and the association between help-seeking behaviors and natural mentoring have yet to be examined. In order to fill these gaps in the literature, this study explored whether help-seeking behaviors mediated the association between college students' attachment to parents and the presence of NMRs.

Quality of Mentoring Relationships

To better understand the role of mentoring in college students' outcomes, it is critical to examine the dynamics through which mentoring relationships may promote positive outcomes. The quality of mentoring relationships has been suggested to be at the center of understanding how mentoring works (Deutsch & Spencer, 2009; Nakkula & Harris, 2005; Rhodes, 2002). Research suggests that to investigate the quality of mentoring relationships requires assessing the dyad's relationship characteristics (Deutsch & Spencer, 2009; Goldner & Mayseless, 2008; Nakkula & Harris, 2005).

Researchers have singled out characteristics of mentor-mentee relationships that are important in positive youth development, including 1) the *frequency* of contact between mentors and mentees (DuBois & Neville, 1997; Parra, DuBois, Neville, Pugh-Lilly & Povinelli, 2002; Rhodes & DuBois, 2006), and 2) the *social support* provided by mentors (Barrera & Bonds, 2005; Rhodes, Ebert & Fisher, 1992). These characteristics have been suggested to be core dimensions of the quality of mentoring (Deutsch & Spencer, 2009). The role of these mentoring characteristics in youth outcomes is reviewed below.

Frequency of Contact

Mentoring frequency is defined as the number of times that a mentor and a mentee interact. Regular and consistent contact has been shown to be important

for enabling other processes to occur within the mentoring relationship (Rhodes & DuBois, 2006). The importance of the frequency of contact is rooted in the idea that by spending time together on a regular basis, a mentor and mentee will have more opportunities to be involved in each others' lives, which ultimately will help them develop trust and a closer bond. A study revealed that frequency of contact in NMRs was highly associated with reports of greater closeness in youth's NMRs (DuBois & Silverthorn, 2005b). A number of authors have also suggested that the close bond is what ultimately results in positive youth outcomes (DuBois, Holloway, Valentine & Cooper, 2002; DuBois & Neville, 1997; Rhodes & DuBois, 2006; Sanchez et al., 2008).

Research supports the idea that more frequent contact between mentors and mentees is beneficial. For example, DuBois and Neville (1997) found that the frequency of contact and the length of mentor-mentee relationship accounted for 63% of the variance in participants' perceived relationship benefits. A national telephone survey of 1,504 adults who were mentors to youth ages 10 to18 found that more time spent with mentees was associated with more emotional and instrumental support in mentoring relationships (McLearn, Colasanto, & Schoen, 1998). Additionally, two meta-analyses investigating mentoring program outcomes showed that more frequent contact between youth and mentors contributed to more positive youth outcomes (DuBois et al., 2002; DuBois et al., 2011). A study of NMRs showed that more frequent mentor-mentee contact predicted lower school absenteeism rates in high school students and a wider range of mentor support (Sanchez et al., 2008). These findings suggest that frequency of contact between youth and mentors does not have a direct effect on

youth's outcomes, but rather it has an indirect effect by fostering the development of mentor-mentee closeness (DuBois et al., 2002; DuBois et al., 2011; DuBois and Neville, 1997; McLearn, Colasanto, & Schoen, 1998). However, as mentioned previously, many additional characteristics of mentoring relationships, such as the number of mentors or the amount of support provided, may also be influencing these positive outcomes (Sanchez et al., 2008; Zimmerman et al., 2005).

Within the college context, the frequency of interaction between students and faculty members has been found to be beneficial for students. A recent longitudinal study of 58,281 students in the University of California system found that more frequent interactions between students and faculty outside of the classroom predicted higher GPAs (Kim & Sax, 2009). These findings suggest that interaction between students and faculty members that go beyond classroom interactions (e.g., students' participation in volunteer or paid research activities, talking with faculty outside of class, e-mail communications with faculty) are beneficial to students' academic development.

Santos and Reigadas (2002) also found that frequency of contact between mentors and college students was related to more positive academic adjustment. Specifically, more frequent contact was associated with higher college self-efficacy, better defined academic goals and greater commitment to perform well and academic obligations. Given that this is the only study examining the frequency of contact in mentoring relationships and college outcomes, more research is needed to understand whether frequency of contact between students and mentors positively influence students during their transition to college. Thus,

this study contributed to the literature by examining the association between frequency of contact in NMRs and college students' outcomes.

Social Support

Another important aspect of the quality of mentoring relationships is the social support provided by mentors (Barrera & Bonds, 2005). The theoretical constructs to understand NMR social support stems from Barrera's definition of social support (Barrera & Ainlay, 1983), which proposes a behavioral typology that includes

> "(a) material aid – provision of material objects, (b) physical assistance – sharing tasks, (c) Nondirective support – listening, expressions of caring, being with a person during a time of need, (d) directive guidance – giving advice, guidance, information, and (e) social participation – Sharing fun and relaxing actives" (p. 133, Barrera & Bonds, 2005).

Researchers discuss mentors' support as being at the heart of the instrumental domain of mentoring quality (Barrera & Bonds, 2005; Deutsch & Spencer, 2009; Nakkula & Harris, 2005). Researchers have documented the different types of perceived support that mentors provide to mentees (Barrera & Bonds, 2005; Deutsch & Spencer, 2009; Nakkula & Harris, 2005). In particular, natural mentors have been found to provide mentees with emotional support, tangible support, cognitive guidance, informational and experiential support, and role modeling (Greeson, Usher & Grinstein-Weiss, 2010; Holt, Bry & Johnson, 2008; Morales, 2010; Sanchez et al., 2006; Sanchez et al., 2008).

A qualitative study provides insight regarding the specific ways in which on-campus natural mentors provide support to college students (Morales, 2010). Morales' (2010) study of 15 Dominican American male college students found

that faculty, staff and administrators who served as natural mentors were providers of academic knowledge (e.g., how to write a paper) and procedural knowledge (e.g., how to apply to a scholarship). Morales (2010) suggested that these mentors provided students with essential knowledge on academic matters that students did not acquire in high school and would not have received otherwise without these NMRs. Morales' (2010) study shows that these mentors played an important role in these young men's educational progress.

Four studies have investigated the association between NMR social support and youth's outcomes (Greeson, Usher & Grinstein-Weiss, 2010; Holt, Bry & Johnson, 2008; Sanchez et al., 2008; Rhodes, Contreras & Mangelsdorf, 1994). A cross-sectional study examining the NMRs of 140 Latino high school students (Sanchez et al., 2008) showed that more social support in education provided by mentors predicted students' higher GPAs, lower absenteeism rates and a greater sense of school belonging (Sanchez et al., 2008). Similarly, Holt, Bry and Johnson's (2008) evaluation of a school-based mentoring program showed that more instrumental support provided by mentors was related to fewer discipline referrals in an ethnically diverse sample of 9^{th}-grade students. Further, more availability to support was related to a stronger sense of school belonging in students. A recent longitudinal study of 14,823 young adults between the ages of 18 and 26 with and without foster care experience explored the association between natural mentoring and youth's asset-related outcomes (e.g., having a bank account, being employed; Greeson, Usher & Grinstein-Weiss, 2010). The authors found that having mentors who provided support predicted having a bank account. In particular, they found that having mentors who provided role

modeling, guidance and advice was related to having a bank account (Greeson, Usher & Grinstein-Weiss, 2010).

In sum, only four studies have demonstrated that the support provided by natural mentors to youth plays a positive role in their social, academic and asset-related outcomes. Research on college mentoring has yet to examine the role of NMR support on students' college academic outcomes, such as college adjustment and GPA. There is a lack of knowledge about the support provided by natural mentors and how this support may help students succeed during their transition to college. Thus, the present study investigated the relationship between students' academic outcomes and the availability and satisfaction of mentoring support.

Overall, the literature suggests that there is a need for future studies to provide more in-depth knowledge about the quality of NMRs during the transition to college and its role in youth outcomes (Zimmerman et al, 2005). The present study assessed the quality of NMR, by examining relationship frequency and social support.

Rationale

Given the potential positive outcomes that a college education allows young adults to achieve in their lives, it is imperative to investigate the transition to college. Learning about the college transition would help college administrators develop adequate support mechanisms and programs to help young adults successfully navigate the initial stressors experienced during the first year of college. In particular, during the first year, college students face a number of social, psychological and academic challenges (Hays & Oxley, 1986; Hicks &

Heastie, 2008; Larose et al., 2005; Lubker & Etzel, 2007; Thomson, 2008); such challenges endanger students' success and put them at risk for dropping out. Understanding young adults' college transition experiences will help in the development of college practices aimed to reduce attrition, and as a result, improve young adults' access to more financial stability and increase their chances for more positive life experiences (Gallo & Matthews, 2003; Porctor & Dalakar, 2003; Seteverink et al., 2001). One of the ways in which researchers and practitioners have attempted to promote a healthy transition to college is by providing mentoring programs to students. Research on mentoring shows that it plays a positive role in college students (Crisp & Cruz, 2009). However, there is a lack of understanding of how NMRs may contribute to students' adjustment to college as only a few studies have focused on natural mentoring in college. More research is needed to establish the association between the presence of natural mentoring and academic outcomes during the transition to college because knowledge about these relationships can be applied to the development and implementation of formal mentoring programs targeting college students.

Another gap in the mentoring literature is that very few researchers have investigated predictors of mentoring relationships, and no studies have examined this within the college context. Attachment theorists argue that early attachment styles persist and evolve into adulthood in a consistent way and predict how well adults cope with developmental milestones, such as adjusting to college (Kenny & Rice 1995; Lopez & Gormerly, 2002; Mallinkrodit & Wei, 2005; Marmarsh & Markin, 2007). Hence, the present study examined whether college students' attachment to their parents predict the presence of NMRs. Also, past research

suggests that individuals' coping style, particularly help-seeking behaviors, may explain the association between attachment and social support (Larose & Bernier, 2001; Larose, Bernier, Soucy & Duchesne, 1999). Secure attachment style may lead college students to engage in support-seeking strategies and thus form NMRs in the college context. This study further contributes to the research literature by examining this coping style as a mediator between attachment and mentoring.

Statement of Hypotheses

Hypothesis I

This cross-sectional study of college students tested the hypothesis that higher levels of parental attachment would significantly predict the presence of NMR on campus. Second, it was expected that higher levels of parental attachment would significantly predict more help-seeking behaviors. Third, it was expected that help-seeking strategies would mediate the association between attachment to parents and having a mentor. Finally, it was hypothesized that the presence of NMRs on campus would predict a more healthy adjustment to college and higher grade point average (GPA). This set of relationships was tested using structural equation modeling (SEM; see Figure 2).

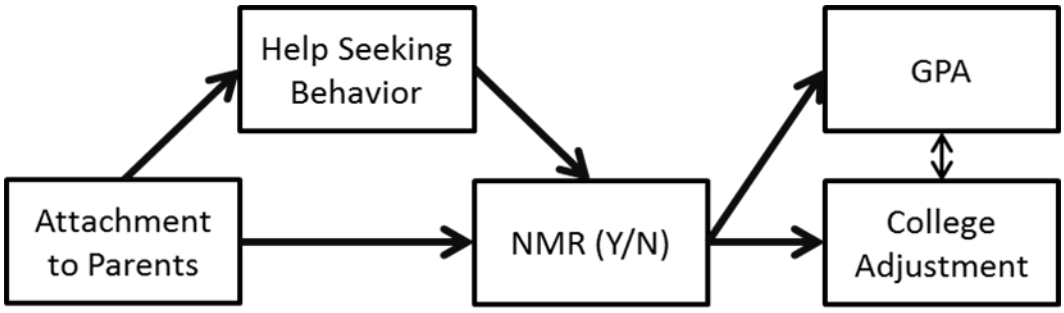

Figure 2. Hypothesis I: Predictors of the presence of NMRs, college adjustment and GPA.

Hypothesis II

The second hypothesized model was tested only with participants who reported having a natural mentor. The same set of associations tested in the first hypothesis was tested here. The difference between the two models is the natural mentoring variable, which in this case is a continuous variable indicating the number (1 to 3) of NMRs. This association was tested to determine whether there is a cumulative effect of the number of NMRs on campus in predicting a more healthy adjustment to college and higher GPA. SEM was used to test this model (see Figure 3).

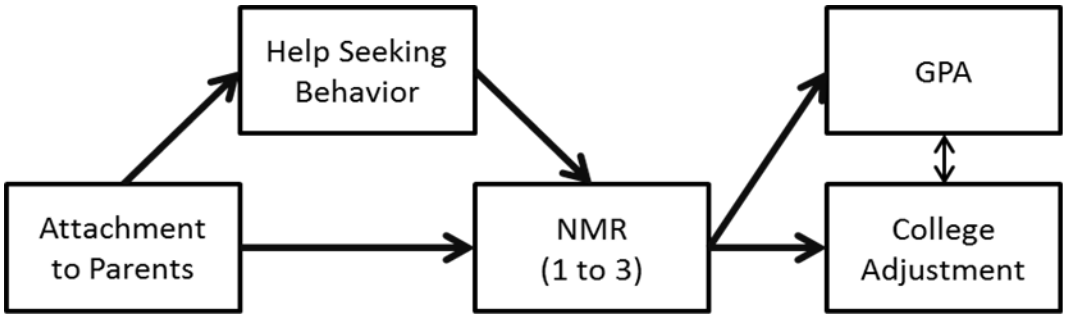

Figure 3. Hypothesis II: Predictors of the number of NMRs, college adjustment, and GPA among students with mentors.

Hypothesis III

The last model was also tested only with participants with natural mentors in order to determine whether parental attachment predicted characteristics of mentoring and whether the characteristics predicted college adjustment and GPA. Specifically, it was first expected that higher levels of parental attachment would significantly predict more frequent mentoring contact and more social support. Second, it was expected that higher levels of parental attachment would significantly predict more help-seeking behaviors. Third, it was hypothesized that

help-seeking strategies would mediate the association between attachment to parents and both the frequency of contact and the availability of mentor support. Forth, I also hypothesized that the frequency of contact and the availability of support would predict students' satisfaction with the support provided by the mentor. Finally, I expected that students' satisfaction with mentor support would predict a more healthy adjustment to college and higher GPA. These set of relationships were tested using SEM. Figure 4 provides a visual display of how all the variables are related to one another and an overview of the third hypothesized model.

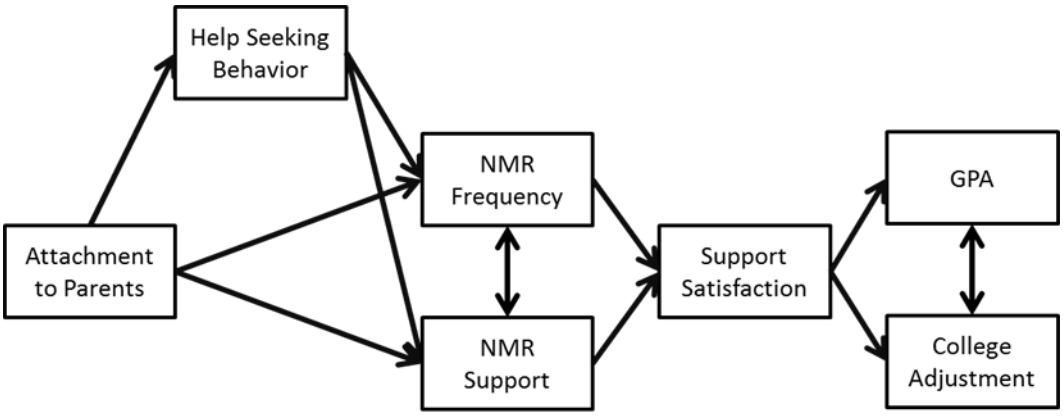

Figure 4. Hypothesis III: Predictors of the quality of NMRs, college adjustment, and GPA.

CHAPTER II.

METHODS

The current study is part of a larger investigation of first-year college students' experiences, and data were analyzed to test the research hypotheses.

Participants

Participants of this study are first-year students at a large, urban, private university. A total of 2,531 freshmen were enrolled in Autumn 2009. The Autumn 2009 first year class was 48% male (*n*=1,031), 36% (*n*=918) ethnic minority (444 (48%) Latino, 187 (20%) Asian/Pacific, 191 (21%) African-American, 10 (1%) Pacific Islander, 80 (9%) multiracial/non-Hispanic backgrounds, 6 (.6%) Native American), and 35% (*n*=880) first-generation college students (i.e., come from families in which neither parent has a college degree). Sixty-two percent (*n*=554) of the Autumn 2009 first-generation college freshmen were women. Latino and African-American students comprised 40% (*n*=375) of the first-generation college freshmen, and 59% (*n*=221) of all Latino and African-American freshmen were first-generation college students.

All first-year students were contacted via e-mail (see Appendix A) by staff from a department focusing on enrollment at the beginning of Spring Quarter 2010. The e-mail briefly described the purpose and procedures of the study and invited students to visit the study website to obtain more information. Flyers (see Appendix A) about the study were also distributed around campus. The study's web page, which was located on www.surveymonkey.com, described participants' rights, the risks and benefits to participating in the study, as well as

information about the time it would take to complete the survey. Students were informed that the first 30 participants to complete the survey would receive a $10 gift card to one of the following: Dominick's, Subway, Starbucks, or iTunes.

Three e-mails inviting students to participate in the study were sent to all the freshmen enrolled in spring 2010. A total of 521 students visited the survey's web page. Four hundred and eighty-two consented to participate in the study, and of the 482 participants, 451 (94%) completed the question regarding whether or not they had a NMR on campus. Of the 451 participants, 42 (9%) did not report any information about their mentors (i.e., relationship type, mentor's demographics, frequency of contact, support). These 42 participants were excluded from study analyses.

The final sample size for the current study is 409 students, which represented 16% of the first-year class. Participants' ages were between 17 and 23 years old (M = 18.64; SD = 0.60). Participants were 70% female (n=288), 39% (n=158) were ethnic minority (58 (14%) Latino, 42 (10%) Asian/Pacific Islander, 27 (7%) African-American, 11 (3%) Multiracial, 20 (5%) others), and 39% (n=155) were first-generation college students.

Hypothesis II and III were tested with a sub-group of students (n=134; 32%), which comprised of those who reported having at least one NMR on campus and provided information about their mentors and mentoring relationships. These participants' ages are between 18 and 20 years old (M = 18.60; SD = 0.54). Participants were 75% female (n=101), 49% (n=66) were ethnic minority (26 (19%) Latino/a, 20 (15%) Asian/Pacific Islander, 15 (11%)

African-American, 2 (1.5%) Multiracial, 3 (2.5%) others), and 39% (*n*=52) were first-generation college students.

Procedures

Informed consent was conducted on the study web page (see Appendix A). After informed consent was completed, participants were invited to complete the web-based survey, which took approximately 20 to 30 minutes to complete. Participants completed the survey by the end of the spring quarter (between beginning of April and end of May, 2010). The survey did not ask participants to report identifiable information. When participants completed the survey they were taken to a separate questionnaire, and they were asked to provide their e-mail address so that incentives could be provided to them. The email addresses were kept in a separate database that was not linked to the survey responses.

Measures

The survey included six different measures for a total of 142 items (see Appendix B). Only the measures relevant to the current study are described here.

Demographic Characteristics

Information regarding participants' gender, age, ethnicity, college generational status, place of residency and household structure were gathered. College generational status was determined by examining participants' parents' educational level. Parental educational level was assessed by asking participants "How far did your mother (or the person who is like your mother) go in school?" and "How far did your father (or the person who is like your father) go in school?" To answer these questions participants chose one of the following options: less than a high school graduate (1), high school graduate (2), technical

school or 2-year College (associate's degree; 3), 4-year College (bachelor's degree; 4), Master's degree (5), PhD. or professional degree (6), and I Don't know (7). First-generation college status was assigned to participants for whom neither parent obtained at least a 2-year college degree.

Academic Achievement

Students' were asked to report their college cumulative GPA. The questions asked was: "What is your most recent cumulative GPA at the University?"

Attachment

To assess participants' attachment to their parents, participants completed the Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987), which is based on Bowlby's theory (1969). The IPPA's 28 items assess adolescents' perceptions of their relationship with their parents. The Attachment to Peer scale was not used in this study. The IPPA evaluates the degree of mutual trust (10 items; e.g., "*my parents respect my feelings*"), the quality of communication (10 items; e.g., "*my parents can tell when I am upset about something*"), and the prevalence of anger and alienation with Parents (8 items; e.g., "*Talking over problems with my parents makes me feel ashamed or foolish*"). The IPPA has been used with college student samples, particularly first-year college students, and has shown excellent reliability (Cronbach alpha values ranged between .94 and .96; Larose & Boivin, 1998; Soucy et al, 2000). Each item has a 5-point Likert-type response, with choices ranging from *almost never* or *never true* (1) to *almost always* or *always true* (5), and 10 of these 28 items are reversed scored. The construct validity of the IPPA is well established (Armsden

& Greenberg, 1987). High test-retest reliability has been reported (*r*=.93) for a three-week period (Armsden & Greenberg, 1987). Ten of the items were reverse scored and then a total score was calculated for each participant. Total possible scores range from 28 to 140, with higher scores indicating a healthier attachment. The reliability of this scale was high (α = .93).

Coping

Students' help seeking strategies was assessed by using a subscale of an adapted version of the Children's Coping Strategies Checklist (Ayers, Sandler, West, & Rosa, 1996). The Children's Coping Strategies Checklist (CCSC) asks participants how often they apply a given strategy to solve a problem or to feel better when they had a problem. The subscale used in the present study was the support seeking strategies subscale (Ayers, Sandler, West, & Rosa, 1996). A number of studies have used this scale with adolescents between 12- and 18-years-old (Bal, Crombez, Oost & Debourdeaudhuij, 2003; Gaylord-Harden, Gipson, Mance, & Grant, 2003; Prelow, Michaels, Reyes, Knight & Barrera, 2001). The support seeking strategies subscale includes two 4-item scales assessing Problem-Focused Support (PFS), which involves the use of other people to help in finding a solution to a given problem (e.g., *You talked to someone who could help you solve the problem*), and Emotion-Focused Support (EFS), which assesses other people's involvement in listening to individuals' feelings or help in understanding situations so that individuals become less upset (e.g., *You told other people what made you feel the way you did*). Each question has a 4-point Likert-type response format, ranging from *never* (1) to *most of the time* (4). The support seeking strategies measure has an internal reliability of .85 (Ayers et al.,

1996). Also, Cronbach alpha values for the PFS and the EFS were .74 and .79, respectively (Ayers et al., 1996). The construct validity of the Support Seeking Strategies Scale and its subscales has been established by Sandler, Tein and West (1994). High test-retest reliability has been reported for the support seeking strategies scale (r=.79), the PFS (r=.75) and the EFS (r=.73) (Sandler et al., 1994). Scoring for the Support Seeking Strategies subscale was calculated by summing participants' responses to each item and dividing it by 8 to create a mean score, with higher scores indicating more frequent use of support seeking strategies. The measure was found to have high internal consistency in this study (α = .87).

Identification of Mentoring Relationships

The question used to identify a mentor is adapted from Sanchez et al.'s (2008) measure assessing NMRs. Students were specifically asked:

> *"Is there anyone at DePaul who is at least two years older and more experienced than you and you go to for support and guidance? This person is not a parent or the person who raised you or a boy/girlfriend, and must be a part of the DePaul campus community. This person is someone who:*
> *a) you can count on to be there for you*
> *b) who believes in you and cares deeply about you*
> *c) who inspires you to do your best, and*
> *d) who has really influenced what you do and the choices you make*
>
> *Do you have a person like this in your life?"*

If participants indicated "yes," then they were able to identify up to 3 individuals and to rank them from the most to the least important person who has had an influence on them on campus. Participants who indicated "yes" to having a

natural mentor on campus were coded as 1 and those who indicated "no" were coded as 0.

The following section describes measures used to collect information about mentors' characteristics and about the mentoring relationship. Participants who responded that they did not have a mentor on campus skipped the following section.

Demographic Characteristics of Mentors

Participants were asked to report the relationship type (i.e., faculty, advisor, teacher assistant, graduate student, university staff member, residence advisor, athletic coach, advanced peer or others), ethnicity, age and gender of each mentor.

Mentoring Relationship Quality

Relationship quality was assessed by measuring the frequency of contact, the availability of mentor social support, and the satisfaction with the support provided by each mentor. Frequency of contact was measured by asking "since you have known this person, how often do you talk to or see this person?" To answer this question participants were asked to choose among the following options: daily (6), weekly (5), monthly (4), every other month (3), once a quarter (2), or other (please specify; 1). A participant checked "other" and specified that s/he had contact with his/her mentor "twice a quarter." Thus, this response was coded as 3. Other participants checked "other", but did not specify and these responses were coded as a missing value. The scale values were changed to daily (5), weekly (4), monthly (3), every other month (2), once a quarter (1). A summed frequency score was calculated for each participant who identified a mentor by

totaling the values across their mentors. Thus, possible scores ranged from 1 to 15, with higher scores indicating more frequent contact with mentors.

An adapted version of the Social Support Network Questionnaire (SSNQ; Gee & Rhodes, 2007) was used to measure mentors' provision of support to students. The participants were asked to complete the SSNQ for each mentor. The SSNQ is a modification and extension of the Arizona Social Support Schedule (ASSIS; Barrera, 1981). The SSNQ has been used in various studies to assess both perceived availability of support and support satisfaction (see Gee & Rhodes, 2007). The theoretical model underlying the SSNQ was tested using a confirmatory factor analysis showing that the theorized model fit the data well (Gee & Rhodes, 2007).

The SSNQ measures five different support domains: emotional support, tangible support, cognitive support, positive feedback, social participation (Gee & Rhodes, 2007). Emotional support is assessed by asking, "If you wanted to talk with someone about something personal or private, would you talk with this person- for instance, if you had something on your mind that was worrying you or making you feel down?" Cognitive support is measured by asking participants, "Would you go to this person if you needed advice or information- for example, if you didn't know where to get something or how to do something?" Tangible support is assessed by asking participants, "Would this person lead or give you something you needed or pitch in to help you with something you needed to do? Perhaps this person would, for example run an errand for you, lend you money, food, clothing, or drive you somewhere you need to go?" Positive feedback support is measured by asking participants, "Can you expect this person to let you

know that they like your ideas or the things that you do?" Social participation support is assessed by asking participants, "Do you get together with this person to have fun and relax?" Gee and Rhodes (2007) included a pregnancy-related support question to assess the unique support need of pregnant adolescents. This item was removed for this study and an item addressing academic-related support was added to the SSNQ to measure perceived availability and satisfaction of academic support. Participants were asked, "Would you go to this person if you needed help with school matters? For example, if you didn't know how to finish a class assignment or how to do something needed for a class such as writing a paper." In sum, the SSNQ adapted version used in this study measures six different support domains: emotional support, tangible support, cognitive support, positive feedback, social participation and academic support.

Cronbach alpha values for the perceived availability of support and the satisfaction with the support were .68 and .88, respectively (Gee & Rhodes, 2007). The construct validity of the SSNQ and its subscales has been established using confirmatory factor analysis by Gee and Rhodes (2007).

Perceived availability of each type of support was measured by asking students to indicate the extent to which the mentor would provide each type of support. Each question has a 4-point Likert-type response, ranging from *never* (1) to *most of the time* (4). A summed perceived availability of support score was calculated for each participant by totaling the values of each type of support for each mentor. Possible scores range from 6 to 24 per mentor. If participants had more than one mentor, then the scores for each mentor was summed across

mentors for a total range of 6 to 72. Higher scores indicate higher perceived availability.

Individuals' satisfaction with each type of support was measured using a 5-point scale (1= *bad* to 5= *very good*). The question that asked participants to assess support satisfaction is worded differently for each type of support, but in general, questions ask about feelings regarding the way things went during the last month when getting such support (e.g., "how good was the practical help you got from this person- how well did it meet your needs?"). Items on this scale were summed for each mentor to obtain an index of satisfaction of support. A summed satisfaction score was calculated for each participant by totaling the values of each type of support across mentors. Possible scores ranged from 6 to 30 per mentor. Thus, for those students who reported at least one mentor, the range was from 6 to 90, with higher scores indicating higher perceived satisfaction.

For this study, the internal consistency of perceived availability of support and the satisfaction of support was high (α's ranged from .69 to .78 for availability and α's ranged from .78 to .87 for satisfaction across mentors).

College Adjustment

Adjustment to college was measured through the Students Adaptation to College Questionnaire (SACQ; Baker & Siryk, 1989). This measure uses a 9-point Likert-type scale ranging from *doesn't apply to me at all* (1) to *applies very closely to me* (9). This scale includes 67 items divided into four subscales: Personal-Emotional Adjustment (PA; 16 items), Social Adjustment (SA; 20 items), Academic Adjustment (AA; 24 items), and Attachment to Institution (AI;

7 items). The PA subscale focuses on the psychological and physical well-being of students (e.g., I have been feeling tense or nervous lately). The SA subscale examines the extent and success of students' social life (e.g., I have a good friend to talk about problems with; I am very involved in social activities in college). The AA subscale measures students' attitudes and behaviors regarding their academic work (e.g., I am enjoying my academic work). Finally, the AI subscale measures students' feelings of belonging in college (e.g., I am pleased now about my decision to attend this college in particular). To create participants' SACQ scores, a mean of all items was calculated. Responses to 37 SACQ items were reverse-coded to calculate the scale's mean value (Baker & Siryk, 1989). The SACQ shows high test-retest reliability, as well as construct validity (Baker & Siryk, 1989). Cronbach's alpha for the total SACQ in this study showed high reliability ($\alpha = .94$).

CHAPTER III.

RESULTS

Descriptive Analyses

First, means and standard deviations were calculated for all the study variables (see Table 1). As stated in the Methods section, it was found that of the 409 participants, 134 (33%) identified at least one mentor on campus. Table 2 shows means and standard deviations on model predictor and outcome variables for participants with and without mentors. Skewness and kurtosis were analyzed to ensure the assumptions of normality were met. Analysis of the distribution shows that the data were almost normally distributed; all variables were found to be normally distributed by the Shapiro-Wilk test of normality and visual inspection of histograms and Q-Q plots.

Table 1.

Means and Standard Deviations for all Study Variables.

	n	*M*	*SD*
Attachment to parents	341	3.73	.65
Help-seeking behavior	342	2.66	.54
Number of NMR (0 to 3)	409	.60	.97
College Adjustment	203	5.71	.87
GPA	405	3.44	.48
NMR Frequency summed	129	3.89	2.26
NMR Support summed	128	32.70	16.62
NMR Satisfaction summed	128	40.86	21.15

Table 2.

Means and Standard Deviations of Students With and Without NMRs.

	NMR (*n*=134)		**NO NMR (*n*=275)**	
	M	*SD*	*M*	*SD*
Attachment to parents	3.77	.67	3.71	.64
Help-seeking behavior	2.74	.53	2.60	.55
College Adjustment	5.71	.90	5.60	.89
GPA	3.42	.43	3.40	.51

Fifty-two (13%) of the 409 participants in the study identified one mentor, 50 (12%) reported two mentors, and 32 (7%) identified three mentors. Table 3 provides descriptive data of the characteristics of mentors. The 134 participants identified a total of 248 mentors. Mentors were 62% female (*n*=154), 142 (57%) were White, 36 (14%) were Latino, 26 (10%) were African-American, 21 (8%) were Asian/Pacific Islander, and 4 (2%) were another ethnicity. Advanced undergraduate students represented the largest group of natural mentors (NM) (36% (*n*= 84) of the 248 mentors). On average, mentors were about 29 to 30 years of age. Table 3 and Figure 4 display mentors' (*n*=248) characteristics by the first, second and third mentor identified by participants.

Table 3.

Mentor Demographic Characteristics and Mentoring Relationship Characteristics.

	Mentor Characteristics			
	Gender ***n*** **(%)**	**Ethnicity** ***n*** **(%)**	**Relationship Type** ***n*** **(%)**	**Age** ***M*** **(*SD*)**
Mentor 1 (*n*=134)	Male 51 (38%) Female 79 (59%) Missing 4 (3%)	White 80 (60%) African American 13 (9%) Latino/a 21 (16%) Asian 12 (9%) Other 8 (5%)	Faculty 25 (18%) Advisor 14 (10%) Adv. Undergraduate/peer 60 (45%) University Staff 16 (12%) Residence Advisor 13 (10%) Graduate Student 5 (4%)	28.89 (11.97)
Mentor 2 (*n*=82)	Male 16 (19%) Female 59 (71%) Missing 17 (20%)	White 38 (46%) African American 9 (10%) Latino/a 12 (15%) Asian 7 (9%) Missing 20 (23%)	Faculty 17 (20%) Advisor 9 (11%) Adv. Undergraduate/peer 19 (23%) University Staff 14 (17%) Residence Advisor 6 (7%) Graduate Student 3(4%) Missing 14 (17%)	29.85 (12.62)
Mentor 3 (*n*=32)	Male 8 (25%) Female 11 (34%) Missing 13 (40%)	White 12 (36%) African American 3 (9%) Latino/a 3 (13%) Asian 1 (3%) Missing 13 (40%)	Faculty 8 (25%) Advisor 5 (15%) Adv. Undergraduate/peer 5 (15%) University Staff 2 (6%) Residence Advisor 6 (19%) Missing 6 (18%)	29.09 (10.28)

Figure 5.

Type of Mentoring Relationship.

* Participants description of "other" category includes: *campus priest, sport team mate, roommate and campus mental health counselor*.

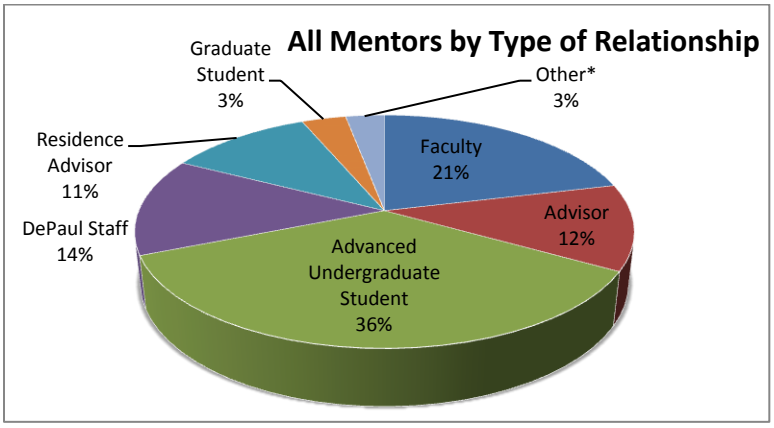

Table 5 provides descriptive data of the mentoring quality (MQ) variables by mentor's rank order. The same MQ variables were also grouped by participants' total number of mentors (see Table 5). Generally, participants had contact with their mentors at least once per quarter (62%) or every other month (24%). As shown in Tables 4 and 5, on average, participants reported that their mentors were available to provide support and that they were pretty satisfied with their support.

Table 4.

Means and Standard Deviations of Mentoring Quality Variables for Mentor 1, 2 and 3.

	Mentoring Relationship Quality		
	Frequency	**Availability of Support**	**Satisfaction**
Rank Order	***M* (*SD*)**	***M* (*SD*)**	***M* (*SD*)**
Mentor 1 (*n*=134)	1.56 (.99)	3.25 (.61)	4.44 (.51)
Mentor 2 (*n*=82)	1.52 (.69)	3.00 (.58)	4.30 (.56)
Mentor 3 (*n*=32)	1.42 (.67)	3.05 (.61)	4.29 (.55)

Table 5.

Means and Standard Deviations of Mentoring Quality (MQ) Variables for Students with 1, 2 and 3 Mentors.

# of Mentoring Relationships Reported by Students	Rank Order	Mentoring Relationship Quality		
		Frequency *M* (*SD*)	**Support *M* (*SD*)**	**Satisfaction *M* (*SD*)**
1 NMR (*n*=52)	Mentor 1	1.47 (.92)	3.28 (.61)	4.41 (.49)
2 NMR (*n*= 50)	Mentor 1	1.55(.99)	3.34 (.60)	4.54 (.45)
	Mentor 2	1.39 (.59)	3.07 (.54)	4.42 (.59)
	Mean	1.42 (.62)	3.20 (.52)	4.48 (.46)
3 NMR (*n*= 32)	Mentor 1	1.69 (.89)	3.08 (.59)	4.32 (.60)
	Mentor 2	1.78 (.78)	2.80 (.61)	4.06 (.06)
	Mentor 3	1.46 (.77)	3.01 (.63)	4.22 (.57)
	Mean	1.69 (.88)	2.94 (54)	4.22 (.57)

The difference on mentoring quality variables among students with 1, 2 and 3 mentors was examined using Analysis of Variance (ANOVA). Specifically, students were compared on the Frequency, Support and Satisfaction variables. There was a significant main effect on students' perception of support (F (2, 32) =3.13, $p< .05$). Students with 1 NMR perceived a significantly higher level of support than students with 2 or 3 mentors. A Tukey's pairwise comparison revealed the significant differences between students having one mentor and having 3 mentors ($p < .05$), but no significant difference between students with two mentors and those having either one or three mentors. Students with 1, 2 or 3 mentors did not significantly differ on frequency of contact or perceived support satisfaction.

Structural Equation Modeling (SEM) Analyses

SEM was used to fit structural models that are consistent with the models hypothesized in the present study (see Figures 5, 6 and 7). The models were tested using AMOS 7.0 software (Joreskog & Sorbom, 1993). The characteristics of the sample and the variables measured warranted the use of the *maximum likelihood* estimation model to test the hypothesized pathways. For this analysis, the covariance matrix of the three hypothesized models was used to assess the proposed path models (Schumacker & Lomax, 2004). After completing path modeling with Amos 7.0, fit statistics were reviewed to determine whether the model is a good fit with the data. Schumacker and Lomax (2004) note that chi-square should have a *p*-value that is greater than .05 in order for the model to be considered a good fit with the data. An additional indicator of goodness of fit is the Tucker-Lewis Index (TLI). Models that have a TLI statistic of .95 or higher are considered a good fit to the data (Hu & Bentler, 1999). A root-mean-square error of approximation (RMSEA) that is less than .05 and a comparative fit index (CFI) that is close to .95 or higher (Schumacker & Lomax, 2004) are also indicators of good fit to the data.

Hypothesis I

First, correlation coefficients were computed among the five variables that were used in the SEM. Bivariate Pearson correlations show strong, positive and significant correlations amongst some of the variables in the proposed model (see Table 6). Help seeking behavior was the only variable to be significantly related to the presence of NMR (Table 6). College adjustment showed a significant

association with attachment to parents, help seeking behavior and GPA. Also, attachment to parents and help seeking behavior were significantly correlated.

Table 6.

Means and Standard Deviations and Bivariate Pearson Correlations Between Hypothesis I Variables.

		1	2	3	4	*n*
1	Attachment to parents	1	-	-	-	378
2	Help-seeking behavior	.31**	1	-	-	375
3	Presence of NMR (1=Yes; 0=No)	.04	.12*	1	-	409
4	College Adjustment	.39**	.28**	.05	1	220
5	GPA	.17**	.08	.03	.23**	447

** Correlation is significant at the 0.01 level

* Correlation is significant at the 0.05 level

The first hypothesized model (see Figure 5) initially did not represent a good fit to the data (χ^2 (4, N = 409) = 44.91, p< .01, CFI = 0.48, TLI = 0.93, RMSEA = 0.15). As shown in Figure 5, the observed variable, *Attachment to parents,* was not a good predictor of the variable, *NMR* (r = 0.04). Also, the observed variable, *NMR,* was not a good predictor of the variable, *College adjustment* (r = 0.05).

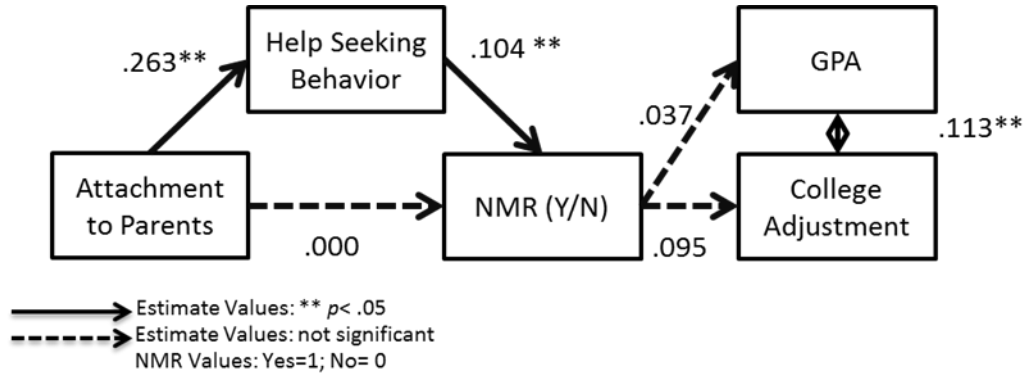

Figure 6. SEM Hypothesis I Original Model: Predictors of the Development of Natural Mentoring Relationships (NMR) & Academic Outcomes (N=409).

The model was then modified from its original design to make it more conceptually and empirically sound. This second SEM was used to fit a structural model that was consistent with the model hypothesized in the conceptual model with any appropriate modifications based on results of the previous quantitative analyses (correlations and prior research findings). Model modifications were made judiciously based on Lagrange Multiplier indices only to the extent that they are theoretically compelling and do not introduce undue changes in existing model parameters. Additional pathways were added between *Attachment to parents* and *College adjustment*, and *Help seeking behaviors* and *College adjustment*. These additions are based on previous research which has shown that attachment to parents is a predictor of college adjustment (Holmbeck & Wandrei, 1993; Kenny & Rice 1995; Larose & Boivin, 1998; Mattanah, Hancock & Brand, 2004). These modifications were also made because the current study found strong and significant correlations between both attachment to parents and college adjustments (r =39, p< .01), and help-seeking behaviors and college adjustment (r =39, p< .01), which suggest the presence of a pathway relevant to the hypothesized model. Also, this new model shows a superior *fit* index with the observed covariance (see Table 6). As indicated in Table 6, attachment to parents and help-seeking behaviors are significantly correlated with college adjustment. These correlations suggest the use of both predictors to adjust the model's fit by creating a path between both predictors and college adjustment. This new model was also tested using AMOS 7.0 software (Joreskog & Sorbom, 1993).

The model presented in Figure 6 is an alternative model than the proposed model in Hypothesis I. After these changes were made the model was rerun and

was found to be an acceptable fit to the data (χ^2 (3, N = 409) = 2.80, p = .422; CFI = 1.00, TLI = 1.01, RMSEA = .000).

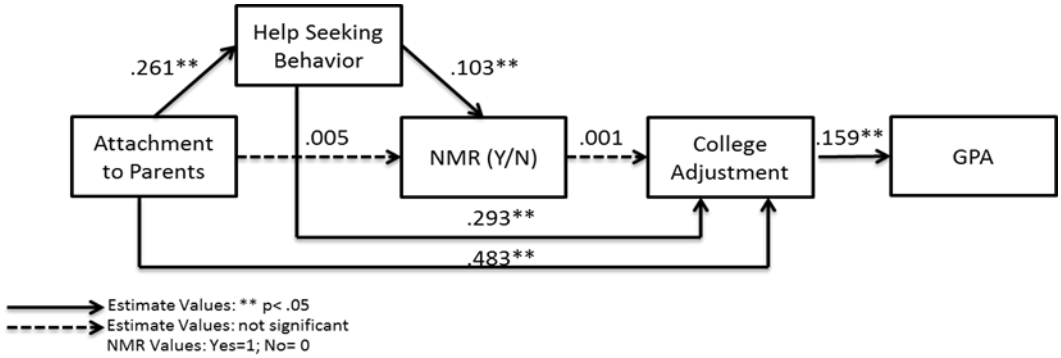

Figure 7. SEM Hypothesis I Alternative Model: Predictors of the Development of Natural Mentoring Relationships (NMR) & Academic Outcomes (N=409).

Attachment to parents, help-seeking behaviors and college adjustment were found to be significantly related. Higher levels of attachment to parents did not significantly correlate with having a NMR, but help-seeking behavior did predict having a NMR (see Figure 6). Students' help-seeking behaviors were found to have a full mediation effect in the relationship between students' attachment to parents and having a NMR. All of the variance of the relationship between attachments to parents and NMR is accounted by the direct effect from the relationship between help-seeking behaviors to the presence of a NMR. The association between students' attachment to their parents and the presence of NMRs was significantly diminish by adding help-seeking behaviors in the model. This suggest that the influence of attachment to parents may have over NMR is more adequately captured as an indirect influence through help-seeking behaviors. The model suggests a path relationship in which attachment to parents predicts help-seeking behaviors, which predicts the presence of NMR. The SEM analysis provided with estimates of indirect effects and their associated standard errors

which were used to determine the mediation effect by a Wald statistic (Little et al., 2007).The Wald statistic test is conducted by multiplying the estimate between attachment to parents and help-seeking behaviors by the estimates between help-seeking behaviors and NMR, and divided by its standard error and then comparing the result to a standard normal distribution given in a number of sources (Baron & Kenny, 1986).

Contrary to the hypothesis, having a mentor did *not* significantly predict college adjustment. Also, attachment to parents and help-seeking behaviors predicted students' college adjustment, such that students with higher levels of attachment to parents and help-seeking behaviors had a more positive college adjustment. Finally, higher levels of college adjustment predicted higher self-reported GPA.

Hypothesis II

Because Hypothesis II used the number of natural mentors (1 to 3) rather than the presence of mentors in the SEM model, correlation coefficients were computed among the number of natural mentors, predictor variables, and outcome variables. Bivariate Pearson correlations show strong, positive and significant correlations amongst some of the variables in the proposed model (see Table 7). The number of NMRs reported by participants was not significantly related to any of the other variables. Attachment to parents was significantly related to help-seeking behaviors and college adjustment, such that the higher the attachment to parents the more help-seeking behaviors and more healthy college adjustment. Finally, a more positive college adjustment was related to higher GPA.

Table 7.

Bivariate Pearson Correlations Among Hypothesis II Variables (N=134).

		1	2	3	4	*n*
1	Attachment to parents	1	-	-	-	120
2	Help-seeking behavior	.28**	1	-	-	120
3	Number of NMR (1 to 3)	.00	-.04	1	-	134
4	College Adjustment	.46**	.20	.22	1	70
5	GPA	.14	.05	.02	.32**	132

** Correlation is significant at the 0.01 level

* Correlation is significant at the 0.05 level

SEM then was used to fit structural models that are consistent with the second hypothesis. The model hypothesized in the conceptual model (see Figure 2) was also tested using AMOS 7.0 software (Joreskog & Sorbom, 1993). After completing path modeling, fit statistics were reviewed to determine whether the model is a good fit to the data. The model (see figure 7) initially did not represent a good fit to the data (χ^2 (4, N = 134) = 15.76, p < .00, CFI = 0.58, TLI = -1.16, RMSEA = 0.14).

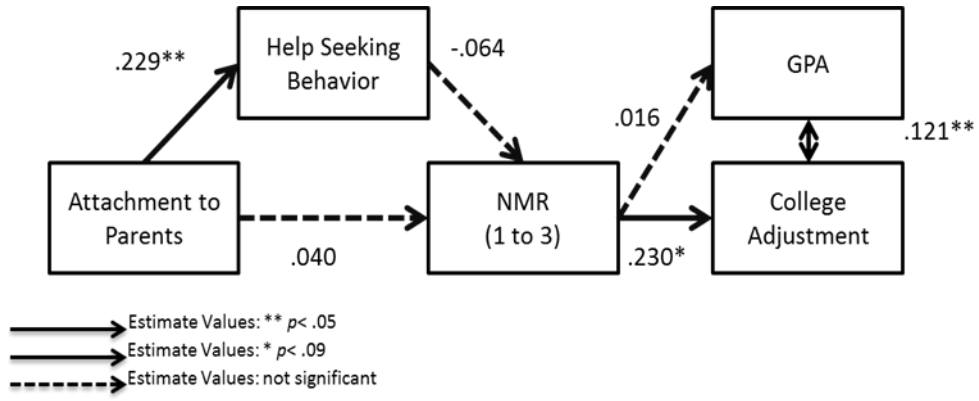

Figure 8. SEM Hypothesis II Original Model: Predictors of the development of natural mentoring relationships (NMR; 1 to 3) and academic outcomes (N=134).

The model for Hypothesis II was then modified from its original design to make it more conceptually and empirically sound. This second SEM was used to fit a structural model that was consistent with the model hypothesized in the conceptual model with any appropriate modifications based on results of the previous quantitative analyses (correlations and previous SEM analysis). Model modifications were made judiciously based on Lagrange Multiplier indices only to the extent that they are theoretically compelling and do not introduce undue changes in existing model parameters. Additional path ways were added to the model. This alternative model shows a superior *fit* index with the observed covariance (see Table 4). As indicated in Table 4, attachment to parents shows a significant correlation with college adjustment. These correlations suggest to adjust the model's fit by creating a path between attachment to parents and college adjustment. Additionally, the linear path model was modified to reflect the significant correlation between college adjustment and GPA. The new model is presented in Figure 8. After the previous changes were made, the model was found to be an acceptable fit to the data (χ^2 (4, N = 134) = 1.53, p = .821; CFI = 1.00, TLI = 1.45, RMSEA = .000).

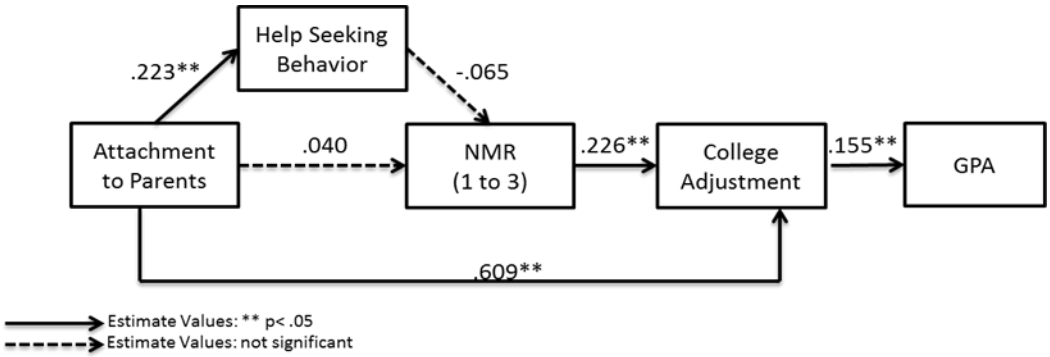

Figure 9. SEM Hypothesis II Alternative Model: Predictors of the number of Natural Mentoring Relationships (NMR; 1 to 3) & Academic Outcomes (n=134).

The exogenous predictor variable, attachment to parents, and the two endogenous, the number of NMRs and college adjustment, were all found to be significant. Neither attachment to parents nor help seeking behavior significantly predicted having a NMR. Figure 8 shows a path relationship, in which more NMRs significantly predicted higher college adjustment, which in turn predicted higher self-reported GPA. Also, more attachment to parents significantly predicted higher college adjustment.

Hypothesis III

Because Hypothesis III examined the mentoring quality variables (i.e., frequency of contact, availability of support and satisfaction with support), these variables were correlated with the predicted and outcome variables. Bivariate Pearson correlations show strong, positive and significant correlation among some of the variables in the hypothesized model (see Table 8). No significant correlations were found between the predictor variables and mentoring quality variables. But there is a significant correlation between frequency of contact and college adjustment, such that more frequent contact is related to better college adjustment. Also, the mentoring quality variables are positively correlated with one another.

Table 8.

Bivariate Pearson Correlations Among Hypothesis III Variables (N=134).

		1	2	3	4	5	6	*N*
1	Attachment to parents	1	-	-	-	-	-	120
2	Help-seeking behavior	.28**	1	-	-	-	-	120
3	NMR Frequency summed	-.06	-.05	1	-	-	-	129
4	NMR Support summed	.00	-.09	.76**	1	-	-	129
5	NMR Satisfaction summed	-.09	-.07	.62**	.75**	1	-	128
6	College adjustment	.46**	.21	.24**	.22	.02	1	70
7	GPA	.14	.05	.01	.09	.05	. 32**	132

** Correlation is significant at the 0.01 level

* Correlation is significant at the 0.05 level

The final hypothesized conceptual model was tested using SEM. The model initially represented a marginally good fit to the data (χ^2 (10, N = 134) = 19.07, p < .04, CFI = 0.98, TLI = .98, RMSEA = .08; see Figure 9).

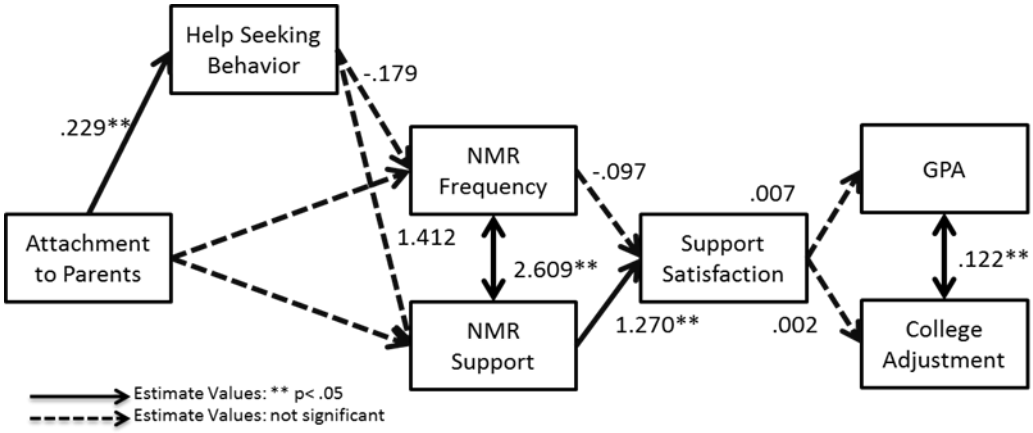

Figure 10. SEM Hypothesis III Original Model: Predictors of Mentoring Quality (MQ: Frequency of contact, Social Support and Support Satisfaction) Variables for Mentor 1,2 and 3 (summed) and Academic Outcomes.

The model was then modified from its original design. This second SEM was used to fit a structural model that is consistent with the model hypothesized, and the changes aimed to make the model more conceptually and empirically sound. Only appropriate modifications, based on results of the previous

quantitative analyses (correlations and previous SEM analysis), were performed to the new model. Model modifications were made judiciously based on Lagrange Multiplier indices only to the extent that they are theoretically compelling and do not introduce undue change in existing model parameters. Additional pathways were added to the model. These new pathways were added based on past mentoring literature that suggests that the frequency of contact between mentors and mentees is necessary to improve other aspects of the mentoring relationship (Deutsch & Spencer, 2009), such as perceived support and support satisfactions. This alternative model shows a superior *fit* index with the observed covariance (see Table 8). As indicated in Table 8, Attachment to parents shows a significant correlation with college adjustment. These correlations suggest the use of additional predictors by creating a path between attachment to parents and college adjustment to adjust the model's fit. Additionally, the linear path model was modified to reflect the significant correlations among NMR Frequency, NMR Support and NMR Satisfaction. The model presented in Figure 10 is the alternative model proposed in Hypothesis III. After these changes were made the model was rerun and was found to be an better fit to the data (χ^2 (11, N = 134) =6.51, p = .837; CFI = 1.00, TLI = 1.02, RMSEA = .000).

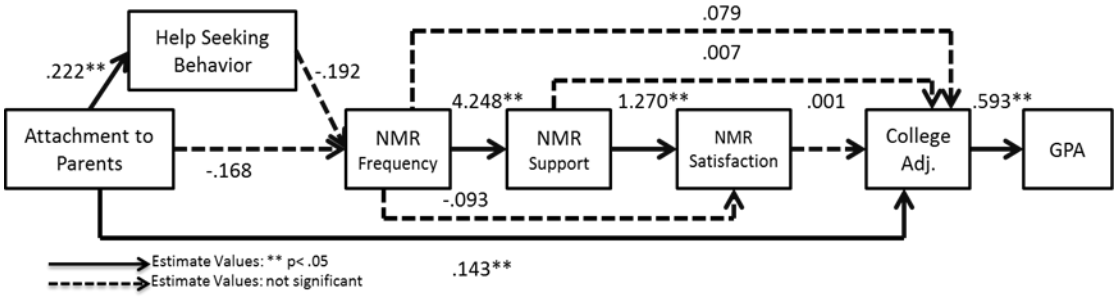

Figure 11. SEM Hypothesis III Alternative Model: Predictors of Mentoring Quality (MQ: Frequency of contact, Social Support and Support Satisfaction) Variables for Mentor 1, 2 and 3 (summed) and Academic Outcomes (N=134).

The exogenous predictor variable, attachment to parents, and the two endogenous variables, NMR Frequency and NMR Support, were all found to be significant. Higher levels of attachment to parents predicted higher levels of college adjustment, but neither attachment to parents nor help seeking behavior significantly predicted NMR Frequency. Figure 10 shows a path relationship, in which NMR Frequency significantly predicted NMR Support, which then predicted NMR satisfaction. That is, more frequent contact with mentors predicted more perceived availability to support from mentors, which then predicted greater satisfaction with mentor support. Neither NMR support nor NMR satisfaction significantly predicted college adjustment, but higher college adjustment significantly predicted higher self-reported GPA.

It is also important to mention that the analyzed path model shows two parameter estimate results showing values over 1. The path between *NMR Frequency* and *NMR Support, NMR Support* and NMR *satisfaction* present an "illogical value" (Kline, 2005 *p*. 114) with an absolute value greater than 1.0. This result can be interpreted as fitting the characteristics of a "Heywood case" (Kline, 2005 *p*. 114). Heywood cases can be caused by extremely high correlation between the path variables that result in empirical under-identification (Kline, 2005) when conducting SEM with unstandardized values. In fact, the associations between *NMR Frequency* and *NMR Support*, *NMR Support* and NMR *satisfaction* are highly correlated (see Table 7).

CHAPTER IV.

DISCUSSION

The aim of this study was to test three hypothesized models examining NMRs during the transition to college. The first model tested the idea that students' attachment to parents would predict NMRs during the college transition, and postulated that students' help-seeking behaviors would mediate the association between attachment and NMRs. The second model tested the same set of predictions only for students who reported having one to three NMRs. The third model also analyzed participants who have at least one NMR and tested the hypothesis that attachment and help-seeking behaviors would predict the quality of NMRs. Finally, the three models also examined whether a) the presence of an NMR, b) the number of NMRs, and c) the quality of NMRs predicted students' adjustment to college and GPA.

Predictors of the Development of Natural Mentoring Relationships

The present study explored the theoretical framework suggesting that having a healthy attachment to parents, assumed to be based on positive experiences in early childhood, will increase students' likelihood for developing an NMR (Barrera & Bond, 2005; Zimmerman et al., 2005). It was hypothesized that help-seeking behaviors would mediate the association between attachment and the presence of NMRs. The hypothesized mediation effect was supported because the relationship between attachment and the presence of an NMR shown to be reduced by students' help-seeking behaviors. These associations are adequately captured as linear relationships between the three variables. Specifically, a linear pathway was illustrated, in which higher levels of

attachment to parents was significantly associated with a higher likelihood of students' seeking for help when confronted with problems, and higher levels of help-seeking behaviors was significantly related with the presence of an NMR during the first year of college.

These findings do not challenge the theory that attachment to parents would lead to youth's receptivity to develop NMRs (Barrera & Bond, 2005; Zimmerman, Bingenheimer & Behrendt, 2005), but rather offers a pathway explanation. Attachment to parents was strongly associated with students' coping behaviors (i.e., help-seeking behavior), which in turn predicted the presence of an NMR. The results are consistent with past research findings, which showed that attachment to parents was associated with coping and help-seeking behaviors (Defonzo, Panzarella & Butler, 2001; Larose, 1995; Larose, et al., 1999; Moran, 2007; Wei, Happner & Mallinckrodt, 2003). Findings are also consistent with studies that relate help seeking behaviors to the presence of social support (Barker, 2007; Boldero & Fallon, 1995). Also, Larose and colleagues' (1999) found that parental attachment is related to college students' social support network orientation (the propensity to utilize one's support network in times of need; Vaux, Burba, & Stewart, 1986), which in turn was related to students seeking help, from teachers. The present study is the first to show that help seeking behavior is related to the presence of NMRs.

As stated previously, attachment to parents was not significantly related to the presence of NMRs nor the number of NMRs within the college context. It is possible that first year students with a healthy attachment to their parents entered the college with pre-existing NMRs in their lives outside of college; this might

reduce the likelihood of developing new NMRs during the first year transition. Another possibility is that perhaps students only develop NMRs in response to transitional problems while adjusting to this new social environment. This study shows that students with a healthy attachment to parents are likely to cope with transition problems by asking for help, which then leads to developing NMRs. But if students are not experiencing problems, regardless of their attachment to parents, they might not seek out for help. Thus, they will not develop new NMRs.

The present study also reveals that a more healthy attachment to parents was associated with positive college adjustment regardless of whether students reported a natural mentor. These findings are consistent with a number of other investigations, which reported that attachment to parents is critical for a healthy college adjustment (Holmbeck & Wandrei, 1993; Kenny & Rice 1995; Larose & Boivin, 1998; Mattanah, Hancock & Brand, 2004). Attachment theory suggests that early attachment to caregivers help define the way future challenging life events may be resolved. The theory suggests that the primordial influences of parental attachment on children's development can be observed in how future social environments and relationships will be explored later on in life (Barrera & Bond, 2005; Zimmerman, Bingenheimer & Behrendt, 2005; Rhodes, 2002). Based on this study, it is reasonable to consider attachment to parents as an important antecedent of why some students are able to adjust to college positively during their first year of college while others are not.

The present study found that attachment to parents predicts help-seeking behavior, and in turn, that help-seeking behaviors predict college adjustment. This is consistent with the attachment literature that suggests that early attachment

is a source for developing skills to navigate future social environments. Moreover, the present study is the first showing that help seeking behaviors mediate the relationship between attachments and college adjustment. This means that students' ability to seek help is critical to navigating the first year transition successfully.

Natural Mentoring Relationships and Students' Outcomes

Surprisingly, this study did not find a significant relationship between the presence of NMRs and students' college adjustment and GPA. This finding is inconsistent with literature supporting the theory that youth benefit from the engagement in a mentoring relationship (DuBois et al., 2002; DuBois et al., 2011). A possible explanation for why the presence of NMRs was not significantly associated with college adjustment and GPA might be related to the longevity of the NMR. The duration of a mentoring relationship is a good marker of relationship closeness, trust and empathy, which are developed and strengthened with the passage of time (Deutsch & Spencer, 2009; Nakkula & Harris, 2005). Past research shows that mentoring relationship duration is related to positive academic outcomes (Grossman & Rhodes, 2002; Hamilton & Hamilton, 1992). For instance, a study of African American adolescent mothers showed that participants whose NMRs lasted two years were more likely to remain in high school or graduate compared to participants whose relationships terminated in less than two years (Klaw et al., 2003). In the case of formal mentoring relationships, Grossman and Rhodes (2002) found that youth with mentoring relationships that lasted more than a year reported better academic, psychological, and behavioral outcomes than youth whose relationship terminated

after six months. In the current study, the on-campus NMRs were less than one year in duration (*M*= 5.5 months; *SD*= 1.6 months), with 45% of them being less than 5 months old. Perhaps the NMRs of the students in this study were not developed long enough to make a more positive impact on their college adjustment and GPA, relative to participants without on-campus NMRs.

Another possible explanation for the lack support to this hypothesis is that perhaps some of the students who reported not having an NMR on campus had a strong supportive network off campus, including NMRs. This external supportive network may help students to deal with the stressors associated with the transition to college, and thus they might not have needed the support of additional individuals within the university.

Another plausible explanation for the lack of significant association between the presence of NMRs and students' college adjustment and GPA is related to the characteristics of this particular university campus. Literature examining university campus life and college transition suggest that because every university is likely to have its own administration standards and policies, study findings should be interpreted based on individual campus factors (Thompson, Orr, Thompson & Grover, 2007). Also, issues of institutional culture and campus location should be considered as potential influential factors in students' college experience. In the case of this study, 19.8% of the population used for this study were from the same city where the campus is located (IRMA report, 2011), and another 46.5% were from the suburbs, which means that the city's metropolitan area provided 66.3% of the first year student population used for this study. These demographics suggest that a large number of students have

to commute every day to campus, which means that most students may spend less time on campus compared to students in traditional university campuses. It also suggests that many first year students are likely to have frequent contact with a network of support outside of the campus community. These two possibilities may lower participants' chances of meeting potential mentors and participating in social activities within campus. In fact, this might be the reason why only 30% of the sample reported having a NMR on campus. Participants' regular access to pre-college supportive networks, such as their families, high school and neighborhood networks, may be the reason for students not needing help within college to cope with the college transition. Perhaps some of the students who reported not having a NMR in campus had a strong social support network outside of the university. This external supportive network may have helped students deal with the stressors associated with the transition to college, and thus might not have needed the support of additional individuals within the university.

Although the presence of a natural mentor was not significantly associated with self-reported GPA nor college adjustment, the number of natural mentors reported by participants with mentors was significantly associated to these two student outcomes. That is, among participants with mentors, the more mentors (between 1 and 3 mentors) that they reported on campus, the healthier was their adjustment to college and the higher was their GPA. These findings are consistent with past research showing that more NMRs is related to better academic outcomes in adolescents (Sánchez, Esparza & Colón, 2008). The present study findings show a cumulative effect, of the number of NMRs such that more NMRs is related to more positive transition outcomes. It is possible that the number of

mentors made a difference in college adjustment because of the more availability of support that comes from having more mentors. This is the first study illustrating a significant association between the number of NMRs and college students' outcomes.

Mentoring Quality

Literature on natural mentoring is somewhat underdeveloped in describing the experience of the qualitative aspects of mentoring. This investigation examined frequency of contact, availability of mentor support, and satisfaction with mentor support. The SEM analyses showed no significant association between attachment to parents and any of the NMR quality variables or between help-seeking behaviors and the quality variables. There was also no significant association between students' outcomes and NMR support. However, there was a significant association between frequency of contact and students' adjustment to college (r=.24; p=.01), and frequency of contact significantly predicted NMR support, which then significantly predicted support satisfaction. In other words, the more frequently students met with their mentors, the more supportive they perceived the relationship, which resulted in students feeling more satisfied with the support that their mentor(s) provided.

There are two possible explanations for the lack of association between mentoring quality (i.e., frequency of the relationship, support and support satisfaction) and students' outcomes in this model. The first explanation is related to the longevity of the relationship. As mentioned earlier, perhaps the relationships had not endured long enough in order to develop the qualitative

aspects of NMRs, which made the relationships unable to make a difference in students' grades and adjustment to college.

A second possible explanation is that the social support variables need to be teased out by the type of mentor identified by students. For example, the type of support that a faculty mentor provides to students (e.g., academic support) is likely to be different than the support provided by an advanced peer (e.g., emotional support). Thus, students' perceptions of the support they received may have varied across mentor type (i.e., faculty, graduate students, advanced peer, academic advisor and staff). This suggests that the interaction between mentor type and support type may be related to students' outcomes. The same might have occurred with frequency of contact. It may be the case that students meet more frequently with certain types of mentors, which also implies that the interaction between mentor type and frequency may be related to students' outcomes.

Research on the quality of NMRs during the transition to college is scarce. This study found that the more frequently students meet with their mentors the more supported they feel. However, there is still more to be learned regarding how elements of NMRs, such as longevity, mentor type, and type of support, influences students' first year of college.

Implications for Intervention and Prevention

The need to understand and strengthen students' support systems during their college transition is clearly manifested in today's university and college practices. For example, by the year 1995, 82% of institutions of higher education reported working on retention strategies (Thompson et al., 2007), and by the year 2000, 71% of U.S. colleges and universities offered seminars and advising for

first year students (Gardner, 2001). This study provides colleges and universities a model to re-think how to best support students' transition to college. Although the development of supportive relationships is beyond the control of college institutions, colleges are invested in creating programming aimed at enhancing students' support systems. These efforts should focus on helping students to take initiative to seek faculty support and find others that might provide guidance to make decisions about their academic progress and professional future, as well as learning about basic rules and system within the new college context.

University and college administrators, faculty and staff should acknowledge the importance of student-parent relationships during students' adjustment to college. Higher education institutions should dedicate more resources toward understanding and improving students' relationships with their parents as well as students' help seeking behaviors. For example, universities may use information about students' attachment to parents to determine students' need for possible participation in remedial support classes. These courses would be designed to aid students to experience a healthier college adjustment.

Similarly, universities may offer curricula aimed to improve students' help seeking behaviors, as well as student-parent relationships. For example, colleges and universities may incorporate workshops into first-year students' orientation sessions and these workshops could teach students to develop help-seeking behaviors and skills so that students can learn how to reach out to others (e.g., older peers, faculty, university staff) who have more experience than them in dealing with college related issues (e.g., How to find academic materials?; What to do if they are failing a class?; How to found a tutor?). These workshops should

also teach students about the value of social networks and skill them to improve their support network. Social network theory (Zippay, 1995) suggests that mentors can help youth gain access to people and resources that will propel their development, in this case their development as college students. In this way, workshops can be crafted to equip participants with social skills and instill novel help-seeking behaviors and ways to identify potential care givers that could amend the deleterious effects of the new challenging context by improving their perception of social support, help-seeking competence, and social capital. Also, universities may develop a series of activities aimed to increase first year students' exposure to their new social context, such as social events within educational department to help students to meet faculty teaching their future classes and students from their same field of interest.

Another way of improving students' college adjustment is through facilitating the involvement of parents in students' transition. A number of factors, such as moving into campus housing, the commuting distances, and students' new busy schedule, are some of students' experiences that may decrease parent-student frequency of contact. These experiences are described by the literature as one of the major stressor for students during the transition. Administrators and staff can develop activities to help students deal with the stressor of leaving their families. Doing so will require universities to coordinate activities that include parents' participation. For example, colleges and universities may require the presence of parent or close relatives/care givers during the sequence of orientation activities. These activities should include in their curriculum lessons that prepare students to cope with the lack of parents'

proximity and teach parents about the importance to maintain frequent contact with their sons and daughters.

Additionally, the present study findings have implications for mentoring programs at colleges and universities. Knowing more about NMRs during the college transition helps to guide the development of more effective mentoring programs. Although only a few studies have examined NMRs and college students' outcomes, the evidence suggests that mentoring is valuable during the transition to college. In particular, the present study's findings show that having more than one mentor and more frequent contact with mentors during the first year transition are related to students healthier adjustment to college. These findings are consistent with the college adjustment and college retention literature suggesting that the size of the students' network of support will have a positive effect on students' academic outcomes and reduce the risk of attrition (Garcia, 2010; Museus & Quaye, 2009; Portes & Fernández-Kelly, 2008; Perna & Titus, 2005). Also, the mentoring literature has shown that the frequency of contact between mentors and mentees have positive effects on youth's outcomes (Rhodes & DuBois, 2006). These two findings can be used to develop program practices that ensure a high frequency of contact and foster the development of multiple mentoring relationships.

Finally, consistent with the college mentoring literature (Zalaquett & Lopez, 2006), this study shows that the college mentor's role is not limited only to faculty members; college students' mentors are also university and college staff, advanced undergraduate students, graduate students, and religious leaders

College mentoring programs should explore working with different populations of volunteer mentors and not solely rely on faculty members.

Limitations and Recommendations for Future Research

The present study has limitations. The data used for this study is cross sectional in design; therefore, comparison among different time-points was not possible. Studies using a longitudinal approach are needed to examine how mentoring relationships develop, how they can help students' trajectories through college and whether the role of NMR is sustained or diminished over time. Also, the duration of the relationship is a factor that may hinder the ability to adequately compare mentored vs. non-mentored students' outcomes. As mentioned earlier, the short duration of the NMRs in this study might not have allowed mentors to have an impact on students' outcomes.

Also, the study has minor statistical limitation for interpreting findings, which are important to be explained. There is a reduction of statistical power from Hypothesis I to Hypothesis II and III. The reason for this decrease is the difference in participants used in the different SEM analysis and the number of variables used in the analysis. For example, hypothesis I used the 409 participants that completed the survey, and hypothesis II and III used only the 134 participants that responded having a NMR. Also, hypothesis III has a larger number of variables that Hypothesis I and II. The ration between the total numbers of participants and the number of variables use in an SEM analysis is important to consider because it might determine the validity of the analysis. This ratio will determine SEM analysis statistical power. Despite that all the SEM analysis used to test hypothesis I, II and III respects sample size requirements and the suggested

ration between degrees of freedom and cases for this type of analysis (MacCallum et al., 1996), the statistical power differ among the three SEM analysis presented in this study.

Finally, another possible limitation is that this study only investigated NMRs on campus. Perhaps the NMRs outside of the college context are as or more influential during the college transition relative to NMRs on campus. Thus, future investigations should allow participants to identify NMRs off campus as well.

To improve theoretical understanding of attachment to parents as a predictor of NMRs, future studies should measure attachment to mother and father separately. Past research shows different youth outcomes for those students performing high on mother versus father attachment (Larose, et al. 1999), as well as a significant difference between students' scores of attachment to mother and father and their relationship with students college adjustment (Mattanah, Brand & Hancock, 2004). Also, additional coping styles should be explored as potential predictors of the development of NMRs and college adjustment. The present study showed that seeking for help as a way of coping allows for the development of NMRs and improves college adjustment. It would be interesting to know how other coping styles relate to the development of NMRs and college adjustment.

Future researchers should explore the effects of different mentor types on college adjustment. Particularly, it would be beneficial to investigate which type of mentor best serves the needs of students while transitioning in their first year of college. Researchers should explore the differences in college adjustment levels between those students who are supported by different types of NMR. For

example, this study found that the two most frequently reported NMRs on campus were faculty mentors and older peer mentors. It would be helpful to know whether these two NMRs have a differential effect on the various dimensions of students' college adjustment (i.e., academic adjustment, social adjustment, emotional adjustment and attachment to institution). This finding would help to determine the type of support that should be provided to students in order to promote a healthy adjustment to college.

Also, future studies should analyze the role that NMRs play in attachment to parents and students college adjustment. It is possible that the presence or number of NMRs interacts with parental attachment to affect college adjustment. In general terms, the presence and the number of NMR might serve as a moderator of the relationship between these two variables, such that NMR may affect the direction and/or strength of the relationship between them (Baron and Kenny, 1986). It can be hypnotized that the interaction between students' relationship with parents (e.g. attachment to parents) and the presence of NMR will possibly influence students' college adjustment. By testing NMR moderation effects hypothesis, we will further illuminate our theoretical understanding of both the positive role that attachment to parents has on college adjustment and NMR, and the role that NMR plays on students' first year transition overall. Moreover, studying this moderation will help to further explore the role played by parents-youth relationship in the development of NMR.

Finally, future studies may contribute also to further explore potential influential factors for the development of NMR. It is evident the need of knowing more about other potential predictors of the development of NMR, and the use of

the first year transition presents an opportunity to investigate such phenomena. After all, students going though this transition experience a separation from their social network (i.e. family and school friends), while experiencing a new social context and engaging in new relationships (e.g. roommates, classmates, professors, etc.). It would be of great value to understand the role played by students' demographic variables such as gender, ethnicity or parents' educational background on the development of NMR while engaging in such new and reach social environment during first year of college transition.

This study highlights the importance of continuing research exploring the college first year transition. By understanding the factors that contribute to a successful transition to college, services that aim to provide support to students can be improved. Overall, the college experience may be improved if we know more about the role of students' individual characteristics and their interaction with the social context experienced by students. The field of higher education in general can learn about developmental needs of students transitioning to college, and ultimately this knowledge may contribute to the improvement of students' outcomes.

CHAPTER V

SUMMARY

Literature on the transition to college clearly shows the importance of students' first year experience as a precursor for students' college completion and how challenging this transition is for students (Barnett & Harris, 1984; Hurtado et al., 2007; Lafreniere & Ledgerwood, 1997; Lapsley, Rice & Shadid, 1989; Lubker & Etzel, 2007;Thompson, 2008; Tinto, 1993; Wintre &Yaffe, 2000). Also, literature on college mentoring suggests that mentoring relationships has a positive effect on college students' outcomes (Crisp & Cruz, 2009; Jacobi, 1991). The purpose of this study was to test three models. These models explored predictors and outcomes of natural mentoring relationships (NMRs) during the first year transition to college.

Participants in this study identified a diversity of NMRs on campus (i.e., faculty, graduate students, advanced peer, academic advisor and staff). A linear pathway was found in which higher levels of attachment to parents was significantly associated with a higher likelihood of students' seeking help when confronted with problems; and higher levels of help-seeking behaviors were significantly related with the presence of NMRs. Similarly, attachment to parents and help seeking behaviors were found to predict students' healthier adjustment. However, the presence and the quality of NMRs (i.e. frequency, support and support satisfaction) were not found to significantly predict first year students' college adjustment.

The present study also shows that, for students with NMRs, the number of NMRs is positively related to their adjustment to college. That is, more NMRs

reported by students is related to a healthier adjustment to college. The study also revealed that elements of mentoring quality (i.e., frequency of contact, support and support satisfaction) are highly related to each other and that frequency of contact in particular is significantly related to a healthier adjustment to college.

In sum, the study's findings about predictors of NMR, show evidence to support the theory that youth's attachment to parents and coping style are precursors for the development of NMR and positively impact student's college adjustment. This evidence can be used to inform the development of college policy and interventions and prevention programs targeting first year college students.

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APPENDIX A.

Recruitment Tools

E-mail template

Dear First-Year Students,

This is an invitation to participate in a college study. Students from the Psychology
Department at DePaul (Luciano Berardi and Lauren Winczewski) need the help of **freshmen students** to take part in a 20-minute survey study on their first year college experience.

For your time the **first 30 participants will be awarded a $10 GIFT CARD** to be used at your choice of the following: Dominick's, Subway, Starbucks, and iTunes.

The survey takes about 15-20 minutes to complete, and it is online. You can access the survey by clicking here: **https://www.surveymonkey.com/s/WLQNTRX**
We are studying freshman students' college experience. We are interested in learning about your supportive relationships at DePaul, problem-solving strategies that you have used during your first-year experience, and your overall adjustment to college. Your survey answers will be completely anonymous and confidential, and there will be no negative consequences if you decide not to participate or change your mind later. If you agree to be in this study you will, be asked to fill out a web-based survey. The survey will include questions about your relationship with your parents, supportive relationships at DePaul, problem-solving strategies, your overall adjustment to college and academic achievements. You will also be asked to provide background information about yourself such as age, gender, and ethnicity as well as information about your family's academic background and other related information.

Questions? Please e-mail Luciano Berardi at lberardi@depaul.edu ok Lauren Winczewski at lwinczew@depaul.edu.

We hope you will consider this opportunity to contribute to the understanding of the transition to college. We hope these findings will help to improve the support systems of students navigation their first year in college.

Thanks for your time!!!

COLLEGE EXPERIENCE
First-Year STUDENTS

YOU can **make money** for participating in a college study. Students in the Psychology Department need **freshmen students** to take part in a 20-minute survey study on first year college experience. For your time the first **30 participants** will be awarded a **$10 GIFT CARD** to be used at your choice of the following: *Dominick's, Subway, Starbucks, and iTunes*. So act quickly!

To help your fellow classmates and earn some money, please visit the following to fill out this web-based survey:

https://www.surveymonkey.com/s/WLQNTRX

Questions? Please e-mail Luciano Berardi at lberardi@depaul.edu or Lauren Winczewski at lwinczew@depaul.edu.

Your help is greatly appreciated!

We are studying freshman students' college experience. We are interested in learning about your supportive relationships at DePaul, problem-solving strategies that you have used during your first-year experience, and your overall adjustment to college.

Your survey answers will be completely anonymous and confidential, and there will be no negative consequences if you decide not to participate or change your mind later. If you agree to be in this study you will, be asked to fill out a web-based survey. The survey will include questions about your relationship with your parents, supportive relationships at DePaul, problem-solving strategies, your overall adjustment to college and academic achievements. You will also be asked to provide background information about yourself such as age, gender, and ethnicity as well as information about your family's academic background and other related information.

INFORMATION SHEET FOR PARTICIPATION IN RESEARCH STUDY

First-Year Experience in College

You are being asked to participate in a research study being conducted by Luciano Berardi, a graduate student in Psychology and Lauren Winczewski, an undergraduate student in Psychology at DePaul University. We are asking you because we are trying to learn more about your first-year experience in college. This study will take about 15-20 minutes of your time. If you agree to be in this study, you will be asked to fill out a web-based survey. The survey will include questions about your relationship with your parents, supportive relationships at DePaul, problem-solving strategies, and your overall adjustment to college. You will also be asked to provide background information about yourself such as age, gender, and ethnicity as well as information about your family's academic background and other related information. You can choose not to participate. The first 30 students to complete the survey will receive a $10 gift card from one of four venues: Dominick's, Subway, Starbucks, or iTunes. There will be no negative consequences if you decide not to participate or change your mind later. Your survey responses will be kept confidential.

If you have questions about this study, please contact Luciano Berardi at (773) 325-4719 or lberardi@depaul.edu. If you have questions about your rights as a research participant, you may contact Susan Loess-Perez, DePaul University's Director of Research Protections at 312-362-7593 or by email at sloesspe@depaul.edu.

You may keep this information for your records.

ELECTRONIC CONSENT: Please select your choice below.

Clicking on the "agree" button below indicates that:

- **you have read the above information,**
- **you are a freshman students at DePaul University,**
- **you voluntarily agree to participate in this study,**
- **you are at least 18 years of age.**

If you do not wish to participate in the research study, please decline participation by clicking on the "disagree" button.

○ Agree
○ Disagree

Appendix B.

Measures

First Year Experience in College

Information about Participation in Research Study

You are being asked to participate in a research study being conducted by Luciano Berardi, a graduate student in Psychology and Lauren Winczewski, an undergraduate student in Psychology at DePaul University. We are asking you because we are trying to learn more about your first-year experience in college. This study will take about 15-20 minutes of your time. If you agree to be in this study, you will be asked to fill out a web-based survey. The survey will include questions about your relationship with your parents, supportive relationships at DePaul, problem-solving strategies, and your overall adjustment to college. You will also be asked to provide background information about yourself such as age, gender, and ethnicity as well as information about your family's academic background and other related information. You can choose not to participate. The first 30 students to complete the survey will receive a $10 gift card from one of four venues: Dominick's, Subway, Starbucks, or iTunes. There will be no negative consequences if you decide not to participate or change your mind later. Your survey responses will be kept confidential.

If you have questions about this study, please contact Luciano Berardi at phone number (773) 325-4719 or via e-mail at lberardi@depaul.edu. If you have questions about your rights as a research subject, you may contact Susan Loess-Perez, DePaul University's Director of Research Protections at 312-362-7593 or by email at sloesspe@depaul.edu.

You may keep this information for your records.

ELECTRONIC CONSENT: Please select your choice below.

Clicking on the "agree" button below indicates that:

- you have read the above information,
- you are a freshman student at DePaul University,
- you voluntarily agree to participate in this study,
- you are at least 18 years of age.

If you do not wish to participate in the research study, please decline participation by clicking on the "disagree" button.

◯ Agree

◯ Disagree

Demographics

First, we want to know a little bit about who you are. Please fill in the responses or check the appropriate buttons.

What is your gender?

◯ Male

◯ Female

First Year Experience in College

What is your ethnicity? (check all that apply)

- [ ] African American/Black
- [ ] American Indian/Native American
- [ ] Asian/Pacific Islander (please specify below)
- [ ] White/Caucasian
- [ ] Latino(a) (please specify below)

Other ethnicity (please specify below)

How old are you?

What was your cumulative high school GPA?

What is your most recent cumulative GPA at DePaul?

Where do you currently live?

- ◯ On campus, in student housing
- ◯ Off-campus WITHOUT parents/guardians
- ◯ Off-campus WITH parents/guardians

Other (please specify)

Who do you currently live with? (check all that apply)

- [ ] Mother/Stepmother
- [ ] Father/Stepfather
- [ ] Grandparent
- [ ] Aunt/Uncle
- [ ] Cousin
- [ ] Foster Parents
- [ ] Roommates

Other (please specify)

First Year Experience in College

How far did your mother (or the person who is like your mother) go in school?

- ◯ Less than a high school graduate
- ◯ High school graduate
- ◯ Technical school or 2-year college (associate's degree)
- ◯ 4-year college (bachelor's degree)
- ◯ Master's degree
- ◯ Ph.D. or professional degree
- ◯ I don't know

How far did your father (or the person who is like your father) go in school?

- ◯ Less than a high school graduate
- ◯ High school graduate
- ◯ Technical school or 2-year college (associate's degree)
- ◯ 4-year college (bachelor's degree)
- ◯ Master's degree
- ◯ Ph.D. or professional degree
- ◯ I don't know

If it were up to you, how far would you like to go in your education?

- ◯ Less than a Bachelor's degree
- ◯ Obtain Bachelor's degree
- ◯ Obtain Master's degree
- ◯ Obtain Ph.D. or professional degree (e.g. law degree)

What is the highest level of schooling you really think you will finish?

- ◯ Less than a Bachelor's degree
- ◯ Obtain Bachelor's degree
- ◯ Obtain Master's degree
- ◯ Obtain Ph.D. or professional degree (e.g. law degree)

What is your major? If you are undeclared or do not know yet, please state "Undeclared."

First Year Experience in College

Your Relationship with Your Parents

Please rate how often each statement is true about your relationship with your parents or the people you consider your parents.

	Almost never or never true	Seldom true	Sometimes true	Often true	Almost always or always true
My parents respect my feelings.	◯	◯	◯	◯	◯
I feel my parents are successful as parents.	◯	◯	◯	◯	◯
I wish I had different parents.	◯	◯	◯	◯	◯
My parents accept me as I am.	◯	◯	◯	◯	◯
I have to rely on myself when I have a problem to solve.	◯	◯	◯	◯	◯
I like to get my parents' point of view on things I'm concerned about.	◯	◯	◯	◯	◯
I feel it's no use letting my feelings show.	◯	◯	◯	◯	◯
My parents sense when I'm upset about something.	◯	◯	◯	◯	◯
Talking over my problems with my parents makes me feel ashamed or foolish.	◯	◯	◯	◯	◯
My parents expect too much from me.	◯	◯	◯	◯	◯
I get upset easily at home.	◯	◯	◯	◯	◯
I get upset a lot more than my parents know about.	◯	◯	◯	◯	◯
When we discuss things, my parents consider my point of view.	◯	◯	◯	◯	◯
My parents trust my judgment.	◯	◯	◯	◯	◯
My parents have their own problems, so I don't bother them with mine.	◯	◯	◯	◯	◯
My parents help me to understand myself better.	◯	◯	◯	◯	◯
I tell my parents about my problems and troubles.	◯	◯	◯	◯	◯
I feel angry with my parents.	◯	◯	◯	◯	◯
I don't get much attention at home.	◯	◯	◯	◯	◯
My parents encourage me to talk about my difficulties.	◯	◯	◯	◯	◯
My parents understand me.	◯	◯	◯	◯	◯
I don't know whom I can depend on these days.	◯	◯	◯	◯	◯
When I am angry about something, my parents try to be understanding.	◯	◯	◯	◯	◯
I trust my parents.	◯	◯	◯	◯	◯
My parents don't understand what I'm going through these days.	◯	◯	◯	◯	◯
I can count on my parents when I need to get something off my chest.	◯	◯	◯	◯	◯
I feel that no one understands me.	◯	◯	◯	◯	◯
If my parents know something is bothering me, they ask me about it.	◯	◯	◯	◯	◯

Important People at DePaul

First Year Experience in College

Is there anyone at DePaul who is at least two years older and more experienced than you and you go to for support and guidance? This person is not a parent or the person who raised you or a boy/girlfriend, and must be a part of the DePaul campus community. This person is someone who:

a) you can count on to be there for you
b) who believes in you and cares deeply about you
c) who inspires you to do your best, and
d) who has really influenced what you do and the choices you make

Do you have a person like this in your life?

◯ Yes ◯ No

Important People at DePaul

Who are these important people in your life at DePaul? Don't write their name; just write their relationship to you. For example, write "my professor; my internship supervisor; an on-campus program staff member; my advisor; a graduate student; an advanced undergraduate; a residence advisor (RA)." You can name up to 3 people in your life.

List them in order of importance in your life, from MOST important to LEAST important.

1. _____
2. _____
3. _____

Important Person #1

Please answer the following questions about the Important Person #1 who you typed on the previous page.

What is this person's gender?

◯ Male

◯ Female

What is this person's age? (please estimate)

_____

First Year Experience in College

What is this person's race/ethnicity? (check all that apply)

- [ ] African American/Black
- [ ] American Indian/Native American
- [ ] Asian/Pacific Islander (please specify below)
- [ ] White/Caucasian
- [ ] Latino(a) (please specify below)

Other ethnicity (please specify)

What is your relationship with this person?

- [ ] Faculty
- [ ] Advisor
- [ ] Advanced undergraduate student
- [ ] DePaul staff member (e.g. retention coordinator, OMSA staff, Student Support Services staff, etc.)
- [ ] Residence advisor (RA)
- [ ] Graduate student

Other (please specify)

How did you meet this person?

- [ ] Seeking academic guidance (e.g. advising)
- [ ] Seeking professional assistance (e.g. career planning)
- [ ] In class
- [ ] Participating in a university-sponsored program (e.g. S.T.A.R.S. or other mentoring programs, Student Support Services, Student Leadership Institute, etc.)
- [ ] In a residence hall
- [ ] Participating in a social event
- [ ] At the gym

Other (please specify)

First Year Experience in College

Who initiated the relationship?

- ◯ I approached the person
- ◯ I was invited to meet with the person
- ◯ The person approached me

In what month did you meet this person?

- ◯ Before the school year began
- ◯ September
- ◯ October
- ◯ November
- ◯ December
- ◯ January
- ◯ February

Since you have meet the person, how often do you talk to or see this person?

- ◯ Daily
- ◯ Weekly
- ◯ Monthly
- ◯ Every other month
- ◯ Once a quarter

Other (please specify)

How do you usually have contact with this person?

- ◯ I usually see him/her in person
- ◯ I usually talk to him/her on the phone
- ◯ I usually talk to him/her on e-mail/instant messaging
- ◯ I usually talk to him/her through text messaging

Important Person #1

First Year Experience in College

When you have contact with this person in-person, where do you usually see him/her?(choose all that apply)

- [ ] On-campus office
- [ ] In class
- [ ] At social events
- [ ] At conferences or presentations
- [ ] While attending a campus program
- [ ] In the Student Center, gym, or residence hall

Other (please specify)

Important Person #1

If you wanted to talk to someone about something personal or private, would you talk with this person – for instance, if you had something on your mind that was worrying you or making you feel down?

- ◯ Often
- ◯ Sometimes
- ◯ Seldom
- ◯ Never

Important Person #1

How did you feel about the way things went the times you talked with this person about personal concerns? (Choose one)

- ◯ Very good
- ◯ Good
- ◯ Okay
- ◯ Not too good
- ◯ Bad

Important Person #1

First Year Experience in College

Would this person lend or give you something you needed or pitch in to help you with something you needed to do? Perhaps this person would, for example, run an errand for you, lend you money, food, clothing, or drive you somewhere you needed to go.

- ◯ Often
- ◯ Sometimes
- ◯ Seldom
- ◯ Never

Important Person #1

Overall, how good was the practical help you got from this person - how well did it meet your needs?

- ◯ Very good
- ◯ Good
- ◯ Okay
- ◯ Not too good
- ◯ Bad

Important Person #1

Would you go to this person if you needed advice or information – for example, if you didn't know where to get something or how to do something you needed to do?

- ◯ Often
- ◯ Sometimes
- ◯ Seldom
- ◯ Never

Important Person #1

First Year Experience in College

How did you feel about the advice and information you did get?

- ◯ Very good
- ◯ Good
- ◯ Okay
- ◯ Not too good
- ◯ Bad

Important Person #1

Can you expect this person to let you know that they like your ideas or the things that you do?

- ◯ Often
- ◯ Sometimes
- ◯ Seldom
- ◯ Never

Important Person #1

How did you feel about the way things went the times this person told you that he/she liked your ideas or something that you did? (choose one)

- ◯ Very good
- ◯ Good
- ◯ Okay
- ◯ Not too good
- ◯ Bad

Important Person #1

Do you get together with this person to have fun and relax?

- ◯ Often
- ◯ Sometimes
- ◯ Seldom
- ◯ Never

Important Person #1

First Year Experience in College

How good did you feel about your experiences the times that you got together with this person to have fun and relax? (choose one)

- ◯ Very good
- ◯ Good
- ◯ Okay
- ◯ Not too good
- ◯ Bad

Important Person #1

Would you go to this person if you needed help with school matters? – For example, if you didn't know how to finish a class assignment or how to do something you needed to do for a class such as writing a paper.

- ◯ Often
- ◯ Sometimes
- ◯ Seldom
- ◯ Never

Important Person #1

How good did you feel about the help with school matters you did get from this person?

- ◯ Very good
- ◯ Good
- ◯ Okay
- ◯ Not too good
- ◯ Bad

Important Person #1

First Year Experience in College

Please rate how often you experience the following things from this person:

	Never	Rarely	Sometimes	Often	Always
How often can you expect this person to disappoint you – break promises previously made, not come through for you when you most need him/her, or disappoint you in some other way?	◯	◯	◯	◯	◯
How often does this person butt into your business – watch over the things you do, boss you around, or act like they know what's best for you?	◯	◯	◯	◯	◯
How much does this person criticize you – put you down, make you feel stupid?	◯	◯	◯	◯	◯
How often do you have fights or strong disagreements with this person?	◯	◯	◯	◯	◯

Important Person #2

You have just finished completing information about Important Person #1 at DePaul.

Please check "Yes" if you had listed a second Important Person at DePaul to move forward and complete his/her information. Please check "No" if you DID NOT list a second Important Person.

◯ Yes ◯ No

Important Person #2

Please answer the following questions about the Important Person #2 who you listed earlier.

What is this person's gender?

◯ Male

◯ Female

What is this person's age? (please estimate)

What is this person's race/ethnicity? (check all that apply)

☐ African American/Black

☐ American Indian/Native American

☐ Asian/Pacific Islander (please specify below)

☐ White/Caucasian

☐ Latino(a) (please specify below)

Other ethnicity (please specify)

First Year Experience in College

What is your relationship with this person?

- [ ] Faculty
- [ ] Advisor
- [ ] Advanced undergraduate student
- [ ] DePaul staff member (e.g. retention coordinator, OMSA staff, Student Support Services staff, etc.)
- [ ] Residence advisor (RA)
- [ ] Graduate student

Other (please specify)

How did you meet this person?

- [ ] Seeking academic guidance (e.g. advising)
- [ ] Seeking professional assistance (e.g. career planning)
- [ ] In class
- [ ] Participating in a university-sponsored program (e.g. S.T.A.R.S. or other mentoring programs, Student Support Services, Student Leadership Institute, etc.)
- [ ] In a residence hall
- [ ] Participating in a social event
- [ ] At the gym

Other (please specify)

Who initiated the relationship?

- ◯ I approached the person
- ◯ I was invited to meet with the person
- ◯ The person approached me

First Year Experience in College

In what month did you meet this person?

- ◯ Before the school year began
- ◯ September
- ◯ October
- ◯ November
- ◯ December
- ◯ January
- ◯ February

Since you have met the person, how often do you talk to or see this person?

- ◯ Daily
- ◯ Weekly
- ◯ Monthly
- ◯ Every other month

Other (please specify)

How do you usually have contact with this person?

- ◯ I usually see him/her in person
- ◯ I usually talk to him/her on the phone
- ◯ I usually talk to him/her on e-mail/instant messaging
- ◯ I usually talk to him/her through text messaging

Important Person #2

First Year Experience in College

When you have contact with this person in-person, where do you usually see him/her?(choose all that apply)

- [ ] On-campus office
- [ ] In class
- [ ] At social events
- [ ] At conferences or presentations
- [ ] While attending a campus program
- [ ] In the Student Center, gym, or residence hall

Other (please specify)

Important Person #2

If you wanted to talk to someone about something personal or private, would you talk with this person – for instance, if you had something on your mind that was worrying you or making you feel down?

- ◯ Often
- ◯ Sometimes
- ◯ Seldom
- ◯ Never

Important Person #2

How did you feel about the way things went the times you talked with this person about personal concerns? (Choose one)

- ◯ Very good
- ◯ Good
- ◯ Okay
- ◯ Not too good
- ◯ Bad

Important Person #2

First Year Experience in College

Would this person lend or give you something you needed or pitch in to help you with something you needed to do? Perhaps this person would, for example, run an errand for you, lend you money, food, clothing, or drive you somewhere you needed to go.

- ◯ Often
- ◯ Sometimes
- ◯ Seldom
- ◯ Never

Important Person #2

Overall, how good was the practical help you got from this person - how well did it meet your needs?

- ◯ Very good
- ◯ Good
- ◯ Okay
- ◯ Not too good
- ◯ Bad

Important Person #2

Would you go to this person if you needed advice or information – for example, if you didn't know where to get something or how to do something you needed to do?

- ◯ Often
- ◯ Sometimes
- ◯ Seldom
- ◯ Never

Important Person #2

First Year Experience in College

How did you feel about the advice and information you did get?

- ◯ Very good
- ◯ Good
- ◯ Okay
- ◯ Not too good
- ◯ Bad

Important Person #2

Can you expect this person to let you know that they like your ideas or the things that you do?

- ◯ Often
- ◯ Sometimes
- ◯ Seldom
- ◯ Never

Important Person #2

How did you feel about the way things went the times this person told you that he/she liked your ideas or something that you did? (choose one)

- ◯ Very good
- ◯ Good
- ◯ Okay
- ◯ Not too good
- ◯ Bad

Important Person #2

Do you get together with this person to have fun and relax?

- ◯ Often
- ◯ Sometimes
- ◯ Seldom
- ◯ Never

Important Person #2

First Year Experience in College

How good did you feel about your experiences the times that you got together with this person to have fun and relax? (choose one)

- ◯ Very good
- ◯ Good
- ◯ Okay
- ◯ Not too good
- ◯ Bad

Important Person #2

Would you go to this person if you needed help with school matters? – For example, if you didn't know how to finish a class assignment or how to do something you needed to do for a class such as writing a paper.

- ◯ Often
- ◯ Sometimes
- ◯ Seldom
- ◯ Never

Important Person #2

How good did you feel about the help with school matters you did get from this person?

- ◯ Very good
- ◯ Good
- ◯ Okay
- ◯ Not too good
- ◯ Bad

Important Person #2

First Year Experience in College

Please rate how often you experience the following things from this person:

	Never	Rarely	Sometimes	Often	Always
How often can you expect this person to disappoint you – break promises previously made, not come through for you when you most need him/her, or disappoint you in some other way?	◯	◯	◯	◯	◯
How often does this person butt into your business – watch over the things you do, boss you around, or act like they know what's best for you?	◯	◯	◯	◯	◯
How much does this person criticize you – put you down, make you feel stupid?	◯	◯	◯	◯	◯
How often do you have fights or strong disagreements with this person?	◯	◯	◯	◯	◯

Important Person #3

You have just finished completing information about Important Person #2 at DePaul.

Please check "Yes" if you had listed a third Important Person at DePaul to move forward and complete his/her information. Please check "No" if you DID NOT list a third Important Person.

◯ Yes ◯ No

Important Person #3

What is this person's gender?

◯ Male

◯ Female

What is this person's age? (please estimate)

What is this person's race/ethnicity? (check all that apply)

☐ African American/Black

☐ American Indian/Native American

☐ Asian/Pacific Islander (please specify below)

☐ White/Caucasian

☐ Latino(a) (please specify below)

Other ethnicity (please specify)

First Year Experience in College

What is your relationship with this person?

- [ ] Faculty
- [ ] Advisor
- [ ] Advanced undergraduate student
- [ ] DePaul staff member (e.g. retention coordinator, OMSA staff, Student Support Services staff, etc.)
- [ ] Residence advisor (RA)
- [ ] Graduate student

Other (please specify)

How did you meet this person?

- [ ] Seeking academic guidance (e.g. advising)
- [ ] Seeking professional assistance (e.g. career planning)
- [ ] In class
- [ ] Participating in a university-sponsored program (e.g. S.T.A.R.S. or other mentoring programs, Student Support Services, Student Leadership Institute, etc.)
- [ ] In a residence hall
- [ ] Participating in a social event
- [ ] At the gym

Other (please specify)

Who initiated the relationship?

- ◯ I approached the person
- ◯ I was invited to meet with the person
- ◯ The person approached me

First Year Experience in College

In what month did you meet this person?

- ◯ Before the school year began
- ◯ September
- ◯ October
- ◯ November
- ◯ December
- ◯ January
- ◯ February

Since you have known the person, how often did you talk to or see this person?

- ◯ Daily
- ◯ Weekly
- ◯ Monthly
- ◯ Every other month

Other (please specify)

How do you usually have contact with this person?

- ◯ I usually see him/her in person
- ◯ I usually talk to him/her on the phone
- ◯ I usually talk to him/her on e-mail/instant messaging
- ◯ I usually talk to him/her through text messaging

Important Person #3

First Year Experience in College

When you have contact with this person in-person, where do you usually see him/her?(choose all that apply)

- [ ] On-campus office
- [ ] In class
- [ ] At social events
- [ ] At conferences or presentations
- [ ] While attending a campus program
- [ ] In the Student Center, gym, or residence hall

Other (please specify)

Important Person #3

If you wanted to talk to someone about something personal or private, would you talk with this person – for instance, if you had something on your mind that was worrying you or making you feel down?

- ◯ Often
- ◯ Sometimes
- ◯ Seldom
- ◯ Never

Important Person #3

How did you feel about the way things went the times you talked with this person about personal concerns? (Choose one)

- ◯ Very good
- ◯ Good
- ◯ Okay
- ◯ Not too good
- ◯ Bad

Important Person #3

First Year Experience in College

Would this person lend or give you something you needed or pitch in to help you with something you needed to do? Perhaps this person would, for example, run an errand for you, lend you money, food, clothing, or drive you somewhere you needed to go.

- ◯ Often
- ◯ Sometimes
- ◯ Seldom
- ◯ Never

Important Person #3

Overall, how good was the practical help you got from this person - how well did it meet your needs?

- ◯ Very good
- ◯ Good
- ◯ Okay
- ◯ Not too good
- ◯ Bad

Important Person #3

Would you go to this person if you needed advice or information – for example, if you didn't know where to get something or how to do something you needed to do?

- ◯ Often
- ◯ Sometimes
- ◯ Seldom
- ◯ Never

Important Person #3

First Year Experience in College

How did you feel about the advice and information you did get?

- ◯ Very good
- ◯ Good
- ◯ Okay
- ◯ Not too good
- ◯ Bad

Important Person #3

Can you expect this person to let you know that they like your ideas or the things that you do?

- ◯ Often
- ◯ Sometimes
- ◯ Seldom
- ◯ Never

Important Person #3

How did you feel about the way things went the times this person told you that he/she liked your ideas or something that you did? (choose one)

- ◯ Very good
- ◯ Good
- ◯ Okay
- ◯ Not too good
- ◯ Bad

Important Person #3

Do you get together with this person to have fun and relax?

- ◯ Often
- ◯ Sometimes
- ◯ Seldom
- ◯ Never

Important Person #3

First Year Experience in College

How good did you feel about your experiences the times that you got together with this person to have fun and relax? (choose one)

- ◯ Very good
- ◯ Good
- ◯ Okay
- ◯ Not too good
- ◯ Bad

Important Person #3

Would you go to this person if you needed help with school matters? – For example, if you didn't know how to finish a class assignment or how to do something you needed to do for a class such as writing a paper.

- ◯ Often
- ◯ Sometimes
- ◯ Seldom
- ◯ Never

Important Person #3

How good did you feel about the help with school matters you did get from this person?

- ◯ Very good
- ◯ Good
- ◯ Okay
- ◯ Not too good
- ◯ Bad

Important Person #3

First Year Experience in College

Please rate how often you experience the following things from this person:

	Never	Rarely	Sometimes	Often	Always
How often can you expect this person to disappoint you – break promises previously made, not come through for you when you most need him/her, or disappoint you in some other way?	◯	◯	◯	◯	◯
How often does this person butt into your business – watch over the things you do, boss you around, or act like they know what's best for you?	◯	◯	◯	◯	◯
How much does this person criticize you – put you down, make you feel stupid?	◯	◯	◯	◯	◯
How often do you have fights or strong disagreements with this person?	◯	◯	◯	◯	◯

How I handle problems...

Directions: For each sentence, check the best response that reflects how often you do each of the things below when you have a problem. There are no right or wrong answers.

When I have a problem...

	Never	Sometimes	Often	Always
I tell others how I would like to solve the problem.	◯	◯	◯	◯
I talk to someone who could help me solve the problem.	◯	◯	◯	◯
I tell other people what I want them to do.	◯	◯	◯	◯
I talk to someone who could help me figure out what to do.	◯	◯	◯	◯
I tell other people what I would like to happen.	◯	◯	◯	◯
I talk about my feelings to someone who really understands.	◯	◯	◯	◯
I tell other people what makes me feel the way I do.	◯	◯	◯	◯
I let other people know how I feel.	◯	◯	◯	◯
I tell people how I feel about the problem.	◯	◯	◯	◯

Your College Experience

First Year Experience in College

Directions: Please circle the one answer that best describes how closely each statement applies to you.

	Doesn't apply to me at all							Applies very closely to me
I feel that I fit in well as part of the college environment.	◯	◯	◯	◯	◯	◯	◯	◯
I have been feeling tense or nervous lately.	◯	◯	◯	◯	◯	◯	◯	◯
I have been keeping up to date on my academic work.	◯	◯	◯	◯	◯	◯	◯	◯
I am meeting as many people, and making as many friends as I would like at college.	◯	◯	◯	◯	◯	◯	◯	◯
I know why I'm in college and what I want out of it.	◯	◯	◯	◯	◯	◯	◯	◯
I am finding academic work at college difficult.	◯	◯	◯	◯	◯	◯	◯	◯
Lately I have been feeling blue and moody a lot.	◯	◯	◯	◯	◯	◯	◯	◯
I am very involved with social activities in college.	◯	◯	◯	◯	◯	◯	◯	◯
I am adjusting well to college.	◯	◯	◯	◯	◯	◯	◯	◯
I have NOT been functioning well during examinations.	◯	◯	◯	◯	◯	◯	◯	◯
I have felt tired much of the time lately.	◯	◯	◯	◯	◯	◯	◯	◯
Being on my own, taking responsibility for myself, has not been easy.	◯	◯	◯	◯	◯	◯	◯	◯
I am satisfied with the level at which I am performing academically.	◯	◯	◯	◯	◯	◯	◯	◯
I have had informal, personal contacts with college professors.	◯	◯	◯	◯	◯	◯	◯	◯
I am pleased now about my decision to go to college.	◯	◯	◯	◯	◯	◯	◯	◯
I am pleased now about my decision to attend this college in particular.	◯	◯	◯	◯	◯	◯	◯	◯
I'm NOT working as hard as I should at my course work.	◯	◯	◯	◯	◯	◯	◯	◯
I have several close social ties at college.	◯	◯	◯	◯	◯	◯	◯	◯
My academic goals and purposes are well defined.	◯	◯	◯	◯	◯	◯	◯	◯
I haven't been able to control my emotions very well lately.	◯	◯	◯	◯	◯	◯	◯	◯

Your College Experience

First Year Experience in College

Directions: Please circle the one answer that best describes how closely each statement applies to you.

	Doesn't apply to me at all							Applies very closely to me
I'm not really smart enough for the academic work I am expected to be doing now.	◯	◯	◯	◯	◯	◯	◯	◯
Lonesomeness for home is a source of difficulty for me now.	◯	◯	◯	◯	◯	◯	◯	◯
Getting a college degree is very important to me.	◯	◯	◯	◯	◯	◯	◯	◯
My appetite has been good lately.	◯	◯	◯	◯	◯	◯	◯	◯
I haven't been very efficient in the use of study time lately.	◯	◯	◯	◯	◯	◯	◯	◯
I enjoy living in a college residence hall (please omit if you do not live in a residence hall; any university housing should be regarded as a residence hall).	◯	◯	◯	◯	◯	◯	◯	◯
I enjoy writing papers for courses.	◯	◯	◯	◯	◯	◯	◯	◯
I have been having a lot of headaches lately.	◯	◯	◯	◯	◯	◯	◯	◯
I really haven't had much motivation for studying lately.	◯	◯	◯	◯	◯	◯	◯	◯
I am satisfied with the extracurricular activities available at college.	◯	◯	◯	◯	◯	◯	◯	◯
I've given a lot of thought lately to whether or not I should ask for help from Counseling Services or a psychotherapist outside of college.	◯	◯	◯	◯	◯	◯	◯	◯
Lately I have been having doubts regarding the value of a college education.	◯	◯	◯	◯	◯	◯	◯	◯
I am getting along very well with my roommate(s) at college (please omit if you do not have a roommate).	◯	◯	◯	◯	◯	◯	◯	◯
I wish I were at another college or university.	◯	◯	◯	◯	◯	◯	◯	◯
I've put on (or lost) too much weight recently.	◯	◯	◯	◯	◯	◯	◯	◯
I am satisfied with the number and variety of courses available at college.	◯	◯	◯	◯	◯	◯	◯	◯
I feel that I have enough social skills to get along well in the college setting.	◯	◯	◯	◯	◯	◯	◯	◯
I have been getting angry too easily lately.	◯	◯	◯	◯	◯	◯	◯	◯
Recently I have had trouble concentrating when I try to study.	◯	◯	◯	◯	◯	◯	◯	◯
I haven't been sleeping very well.	◯	◯	◯	◯	◯	◯	◯	◯

Your College Experience

First Year Experience in College

Directions: Please circle the one answer that best describes how closely each statement applies to you.

	Doesn't apply to me at all							Applies very closely to me
I'm not doing well enough academically for the amount of work I put in.	◯	◯	◯	◯	◯	◯	◯	◯
I am having difficulty feeling at ease with other people at college.	◯	◯	◯	◯	◯	◯	◯	◯
I am satisfied with the quality of the caliber of courses available at college.	◯	◯	◯	◯	◯	◯	◯	◯
I am attending classes regularly.	◯	◯	◯	◯	◯	◯	◯	◯
Sometimes my thinking gets muddled up too easily.	◯	◯	◯	◯	◯	◯	◯	◯
I am satisfied with the extent to which I am participating in social activities at college.	◯	◯	◯	◯	◯	◯	◯	◯
I expect to stay at this college for a bachelor's degree.	◯	◯	◯	◯	◯	◯	◯	◯
I haven't been mixing too well with the opposite sex lately.	◯	◯	◯	◯	◯	◯	◯	◯
I worry a lot about my college expenses.	◯	◯	◯	◯	◯	◯	◯	◯
I am enjoying my academic work at college.	◯	◯	◯	◯	◯	◯	◯	◯
I have been feeling lonely a lot at college lately.	◯	◯	◯	◯	◯	◯	◯	◯
I am having a lot of trouble getting started on my homework assignments.	◯	◯	◯	◯	◯	◯	◯	◯
I feel I have good control over my life situation at college.	◯	◯	◯	◯	◯	◯	◯	◯
I am satisfied with my program of courses for this quarter.	◯	◯	◯	◯	◯	◯	◯	◯
I have been feeling in good health lately.	◯	◯	◯	◯	◯	◯	◯	◯
I feel I am very different from other students at college in ways that I don't like.	◯	◯	◯	◯	◯	◯	◯	◯
On balance, I would rather be home than here.	◯	◯	◯	◯	◯	◯	◯	◯
Most of the things I am interested in are not related to any of my course work at college.	◯	◯	◯	◯	◯	◯	◯	◯
Lately I have been giving a lot of thought to transferring to another college.	◯	◯	◯	◯	◯	◯	◯	◯
Lately I have been giving a lot of thought to dropping out of college altogether and for good.	◯	◯	◯	◯	◯	◯	◯	◯
I find myself giving considerable thought to taking time off from college and finishing later.	◯	◯	◯	◯	◯	◯	◯	◯
I am very satisfied with the professors I have now in my courses.	◯	◯	◯	◯	◯	◯	◯	◯
I have some good friends or acquaintances at college with whom I can talk about any problems I may have.	◯	◯	◯	◯	◯	◯	◯	◯
I am experincing a lot of difficulty coping with the stresses imposed upon me in college.	◯	◯	◯	◯	◯	◯	◯	◯
I am quite satisfied with my social life at college.	◯	◯	◯	◯	◯	◯	◯	◯
I'm quite satisified with my academic situation at college.	◯	◯	◯	◯	◯	◯	◯	◯
I feel confident that I will be able to deal in a satisfactory manner with future challenges here at college.	◯	◯	◯	◯	◯	◯	◯	◯

Thank you for your participation!

First Year Experience in College

If you are within the first 30 students to complete this survey, you will be contacted to pick up a $10 gift card of your choice, below:

Which of the following would you like a gift card from? (choose one)

- ◯ Dominick's
- ◯ Subway
- ◯ Starbucks
- ◯ iTunes

Please provide your e-mail address so that we may contact you with information about how to collect your giftcard. Your e-mail address will be kept in a separate database that is not linked with your survey responses, to ensure anonymity. After we send you the information about where and when you can collect your giftcard, we will delete your e-mail address from the database.

Thank you!